

The University of Chicago

A STUDY OF
THE BUSINESS ADMINISTRATION
OF TEACHERS COLLEGES

A DISSERTATION SUBMITTED TO THE FACULTY
OF THE DIVISION OF THE SOCIAL SCIENCES IN
CANDIDACY FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY

DEPARTMENT OF EDUCATION
1935

By
JAMES FRANKLIN WEBB

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CHAPTER I INTRODUCTION

The history of the teachers college shows a rapid development in recent years of this type of educational institution. The facts recorded in this phase of the history of education, however, deal principally with the number of institutions, the number of students, and the educational offering at the various stages of development. The question arises as to whether the progress made in business administration has been sufficient to meet the needs resulting from the rapid educational development in teachers colleges during the last quarter of a century. The present investigation, therefore, will attempt to supply objective evidence which will provide an answer to the foregoing question.

A statement of the problem.- This study aims, first, to present an accurate account of business administration in a selected group of teachers colleges; second, through a critical analysis and interpretation of the data collected to point out elements of deficiency concerning business administration; and third, to define a program of business administration for teachers colleges as a result of a critical evaluation of current practices and an interpretation of the data collected in the light of accepted theory. The specific phases of business administration which will be studied are: (1) financial accounting and reporting, (2) budgetary procedure, (3) the administration of purchasing, and (4) the business organization. As a result of the proposed analysis valid principles and procedures of business administration will be defined and used in developing an adequate program of business administration for teachers colleges.

Related literature.- A brief statement of the various publications concerning the business administration of colleges and universities is presented for the purpose of indicating the nature of the studies and publications reviewed. Detailed business principles and procedures will be introduced where applicable throughout the study.

Burruss¹ made a study in 1921 of the business administra-

¹Julian Ashby Burruss, "A Study of the Business Administration of Colleges Based on an Examination of the Practices of Land-Grant Colleges in the Making and Using of Budgets." Unpublished Doctor's Dissertation, Department of Education, University of Chicago, 1921.

tion of land-grant colleges in so far as this function is covered in budgetary practices and procedures. Eighteen colleges were included in the study. In general, Burruss covered four important topics that are of interest in the present investigation, namely, the tentative budget, the working budget, accounting, and reports.

Arnett¹ published a book in 1922 which treats practically the entire field of college and university finance. It was written with the endowed institution in mind, however, and many of its principal features relate directly to the care and operation of endowments. In this connection the author² states that,

"The preservation and increase of endowment is so important to the well-being of an endowed college or university that the present volume is primarily written to meet the needs of those who are engaged in managing the financial affairs and developing such institutions."

Reeves and Russell³ published a book on college organization and administration in 1929. In discussing the study upon which the book is based the authors⁴ explain that, "The data used in this volume are drawn chiefly from surveys made of sixteen colleges and universities affiliated with the Board of Education of Disciples of Christ." This book treats practically all phases of college organization and administration. Chapter X, however, discusses two topics which are included in the present investigation, namely, accounting and budgetary procedure.

Fraiser and Whitney⁵ published a book on teachers college finance in 1930. The book is composed of two chief parts. The first part is a discussion of the principles of public school finance and an attempt to apply such principles to the problems of teachers college finance. The second part of the book presents a discussion of the business procedure now in operation in the Colorado State Teachers College. The authors discuss problems bearing upon budgetary procedures, purchasing, accounting, and reports.

¹Trevor Arnett, College and University Finance. New York: General Education Board, 1922.

²Ibid., p. 2.

³Floyd W. Reeves and John Dale Russell, College Organization and Administration. Indianapolis, Indiana: Board of Education of Disciples of Christ, 1929.

⁴Ibid., p. 4.

⁵George Willard Frasier and Frederick Lamson Whitney, Teachers College Finance. Greeley, Colorado: Colorado State Teachers College, 1930.

In 1930 Klein¹ made a survey of the land-grant colleges. Part III of Volume I is devoted to a study of business management and finance. The study is concerned with the following topics: (1) organization of the fiscal and business office; (2) income and receipts; (3) distribution of expenditures; (4) business management; (5) auxiliary enterprises and service departments; (6) land and buildings, operation, maintenance, and new additions to the physical plant.

Lindsay and Holland² published a book in 1930 on college and university administration. Chapter V is devoted to a discussion of accounting, budgeting, and purchasing. The book has been written from the viewpoint of the university and the endowed institution.

Morey³ prepared a book on university and college accounting. In discussing the general trend of the book the author points out that,

"In the preparation of the present work the author has made use of the system in effect at the University of Illinois....

Since the University of Illinois is a state institution, one of the largest of the 'Land-Grant' type, the system as presented herein is that which is adapted to that kind of institution."⁴

The topics discussed which are of interest in the present investigation are the budget, the general ledger, income and cash receipts, purchasing and storerooms, expenditures and accounting for appropriations, property accounting, financial reports, and business organization.

The study reported by Rutledge⁵ in 1930 concerns the development of guiding principles for the administration of teachers colleges and normal schools. The principles were selected

¹A. J. Klein, Survey of Land-Grant Colleges and Universities. United States Office of Education Bulletin, Vol. I, No. 9. Washington, D. C.: United States Office of Education, 1930. Pp. 75-258.

²E. E. Lindsay and E. O. Holland, College and University Administration. New York: The Macmillan Company, 1930. Pp. 77-147.

³Lloyd Morey, University and College Accounting. New York: John Wiley and Sons, Inc., 1930.

⁴Ibid., pp. 5-6.

⁵Samuel A. Rutledge, The Development of Guiding Principles for the Administration of Teachers Colleges and Normal Schools. Teachers College Contribution to Education, No. 449. New York: Teachers College, Columbia University, 1930.

from the literature on school administration in general. Three general classifications were employed in organizing the principles relating to the business administration, namely, accounting, budgetary procedure, and purchasing.

Reeves and his associates¹ published a book in 1932 dealing with the liberal arts college. The authors state that,

"The survey, on which this study is based, included thirty-five colleges all of which at the time of the visit were offering a four-year program of liberal arts work, and all of which recognized an affiliation with the Methodist Episcopal Church."²

The topics treated by Reeves et al, which are of interest in the present investigation, are: internal administrative organization, business management, financial accounting, budgetary procedure, financial reports and audits, and supplementary business enterprises.

A number of papers concerning college business administration have been presented before the Association of University and College Business Officers. The papers were usually based on practices in the institution represented by the author. Among these papers may be mentioned that of Hull,³ based on the procedure followed in the University of Utah, and discussing the budget ledger, centralization of purchasing, and the monthly reports made to department heads; that of Phillips,⁴ which discusses budget flexibility, including such items as lump-sum appropriations, contingent funds, and transfers; that of Fay E. Smith,⁵ based on the plan at the University of Wyoming and discussing the collection of budget estimates; and that of Shirley W.

¹Floyd W. Reeves, et al, The Liberal Arts College. Chicago: The University of Chicago Press, 1932.

²Ibid., p. 7.

³Thomas Hull, "Administration of the Budget," Minutes of the Twenty-First Annual Meeting of the Association of University and College Business Officers, pp. 51-55. Lexington, Kentucky: University of Kentucky, 1931.

⁴J. D. Phillips, "Budget Flexibility," Minutes of the Twentieth Annual Meeting of the Association of University and College Business Officers, pp. 26-32. Boulder, Colorado: University of Colorado, 1930.

⁵Fay E. Smith, "Preparation of the Budget," Minutes of the Twenty-First Annual Meeting of the Association of University and College Business Officers, pp. 47-50. Lexington, Kentucky: University of Kentucky, 1931.

Smith,¹ based on the procedure followed at the University of Michigan and discussing the problem of estimating income and expenditures.

At the suggestion of the United States Office of Education, in 1930, the National Committee on Standard Reports for Institutions of Higher Education was organized. Since the date of its organization the committee has published three bulletins that are of interest to the present investigation. In July 1931, they published a bulletin, the title of which is Suggested Forms for Financial Reports of Colleges and Universities.² The bulletin refers directly to annual reports. In August 1932, the committee published "Suggested Forms for Internal Financial Reports of Colleges and Universities";³ in 1933, "Supplementary Suggestions Concerning Financial Report Forms"⁴ was issued. These reports have reference to what are commonly thought of as monthly reports. The nature of the material in these bulletins may be explained by a quotation from the document published in 1931. In preparing this publication the authors state that,

"This report is not a system of accounting and does not attempt to give full instructions regarding accounting procedure....

As a whole, however, the report is intended to present methods of reporting all financial transactions in such a way as to exhibit essential facts in a clear manner....

The activities of a college or university...are distinct and varied in character. Such an institution is not merely one department but is organized into many divisions. A system of accounts and reports is necessary which is adapted to the institution and reflects these conditions. In no other

¹Shirley W. Smith, "Making of a University Budget," Proceedings of the Association of University and College Business Officers, 1925. Pp. 50-64.

²Suggested Forms for Financial Reports of Colleges and Universities. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1931.

³Suggested Forms for Internal Financial Reports of Colleges and Universities. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1932.

⁴Supplementary Suggestions Concerning Financial Report Forms. National Committee on Standard Reports for Institutions of Higher Education, Bulletin No. 8. Chicago: Published by the Committee, (Mimeographed) May, 1933.

way will the accounts be made to serve and the financial facts of the institution be properly and adequately recorded and published."¹

The foregoing statement shows clearly that the bulletin is supposed to be of a general character.

The descriptions of the various publications reveal the fact that only two studies refer directly to the teachers college. The book by Frasier and Whitney cannot be considered as a scientific study of the business administration of teachers colleges, and the study by Rutledge covers only a few of the vital phases of this important function.

Sources of data.- The data used in the investigation were obtained by a study of the business administration of sixteen teachers colleges. A personal visit was made to each institution and the data were collected by the writer while on the campus of each college. Such records as the books of accounting, tentative and operating budgets, order files, correspondence relating to business transactions, inventories, duplicate receipt files, and minutes of board meetings were carefully analyzed. Samples of printed forms for books of accounting, requisition and order forms, budget forms, report forms, voucher forms, and pay-roll forms were secured. In addition, college officials were interviewed for information that could not be secured from the official records and printed forms of the institution.

Location and character of the institutions studied.- The sixteen colleges included in the present investigation are located in twelve different states, namely, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, New Mexico, Ohio, Oklahoma, Texas, and Wisconsin. The location of these states shows that the colleges studied are distributed over a considerable portion of the central part of the United States. These institutions offer four years of college work leading to the Bachelor's degree. Each of the sixteen institutions is a member of the North Central Association of Colleges and Secondary Schools or the Association of Colleges and Secondary Schools of the Southern States. The use of data from such colleges insured a study of standard institutions in which a complete range of activities influencing business administration could be found.

In some states the business administration of teachers colleges is influenced greatly by state laws which tend to produce

¹Suggested Forms for Financial Reports of Colleges and Universities, pp. 2-3. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1931.

considerable uniformity in business practices in many cases. For this reason the study was limited to no more than two institutions in any one state. Only one institution in a state was visited where it was previously known that legal prescriptions resulted in considerable uniformity in business administration in the various colleges of a state. Other facts which indicate the character of the sixteen institutions are presented in Table I. The averages presented in this table indicate that with respect to the number of teachers employed and the number of degrees conferred the colleges included in the present study are representative of the teachers colleges in the United States.

TABLE I
FACTS AFFECTING THE BUSINESS ADMINISTRATION IN
FIFTEEN* TEACHERS COLLEGES FOR THE SCHOOL
YEAR 1930-1931

Institution	Teachers Employed	Enrollment	Degrees Conferred	Current Expenditures	Plant Assets
1. . . .	90	1680	58	\$360,206	\$957,152
2. . . .	105	1089	192	447,000	1,800,000
3. . . .	89	1963	121	572,882	1,463,612
4. . . .	60	1439	207	220,000	645,000
5. . . .	68	726	30	419,800	901,260
6. . . .	110	1400	135	575,000	1,630,874
7. . . .	51	1221	41	500,000	2,250,000
9. . . .	70	1370	95	325,000	2,000,000
10. . . .	39	512	20	160,000	1,000,000
11. . . .	45	570	15		1,158,000
12. . . .	150	2166	210	927,548	2,226,564
13. . . .	61	923	90	568,000	1,200,000
14. . . .	133	1522	172	495,278	1,092,543
15. . . .	63	1659	74	265,588	828,924
16. . . .	17	300	28	192,000	500,000
Average .	77	1236	99	430,593**	1,303,575
Average for United States ¹ .	73	859	79	286,764	918,051

*Institution Number 8 did not have data available.
**Average based on fourteen institutions.

¹Statistics of Teachers Colleges and Normal Schools, 1929-1930. Biennial Survey of Education, United States Department of the Interior, Office of Education Bulletin, No. 20, 1931. Pp. 621-27.

Methods of procedure.- The literature dealing with the business administration of colleges and universities reveals four techniques that have been employed in collecting data concerning this problem. These techniques may be classified as documentary analysis, personal interview, the questionnaire, and the use of expert opinion. The personal interview and documentary analysis appear to be the favorite techniques of investigators who have made previous studies of college administration. A combination of the two methods was employed by Burruss,¹ by Reeves and Russell,² and by Reeves, et al³ in studying the business administration of certain groups of colleges. Klein⁴ employed the questionnaire in the survey of the land-grant colleges and universities. In a study of the principles of college administration Rutledge⁵ followed the method of surveying the existing literature for principles and then evaluating the principles selected on the basis of expert opinion. A discussion of the merits of the foregoing techniques is found in The Questionnaire in Education by Koos⁶ and in Curriculum Construction by Charters.⁷

The personal interview and documentary analysis were employed in collecting the data for the present study. Every precaution possible was taken to insure the validity of the data obtained during the interview. Data sheets were employed and the various college officials were assured that the information collected would be used only in connection with the study. The answer to each question was recorded during the time the interview was in progress. The information placed on the data sheet contained many statements of facts, reasons, justifications, disapprovals, and illustrations of various procedures and practices in addition to the direct answers to the questions. Such devices as a restatement of the question, the giving of illustrations, and the introduction of additional questions were employed to make the point under consideration perfectly clear and to secure accurate information. The code number which had been assigned to each institution was placed on each sheet of questions in order to eliminate the possibility of losing the identity of the infor-

¹Burruss, op. cit., p. 7.

²Reeves and Russell, op. cit., p. 209.

³Reeves, et al, op. cit., p. viii.

⁴Klein, op. cit., p. xi.

⁵Rutledge, op. cit., p. 3.

⁶Leonard V. Koos, The Questionnaire in Education, pp. 15-20, 36, 49, 97. New York: The Macmillan Company, 1928.

⁷W. W. Charters, Curriculum Construction, pp. 133-34. New York: The Macmillan Company, 1924.

mation collected.

Practically the same precautions for insuring accuracy were used in a study of the official documents as were employed in the interview. Special effort was made to use the data collected by a study of official records as a check against the data obtained by means of the interview and vice versa.

Limitations of the study.- As the process of collecting the data progressed certain limitations of the methods used became evident. Probably the most important was due to the fact that only a few institutions could be studied within a reasonable length of time. This limitation rendered the use of certain statistical methods impractical. The fact that some institutions could not provide documentary evidence for certain procedures followed limited the sampling somewhat. For example, only ten of the fifteen institutions which have their accounts audited could supply an auditor's report. The limitations mentioned seemingly have had no significant effect upon the results of the study, however.

Organization of the report.- The report of the various steps taken in this study, together with the conclusions and recommendations, will be organized and presented in subsequent chapters as follows: the information collected relative to financial accounting in this group of colleges is presented in chapter ii. An analysis of the data concerning budgetary procedure is presented in chapter iii. A critical discussion of financial reports in the light of existing conditions and practices is given in chapter iv. The data obtained concerning the administration of purchasing are presented in chapter v. The information collected relative to the business organization in this group of colleges is exhibited in chapter vi. The significant conclusions and a suitable program of business administration for teachers colleges based upon the existing needs of this particular type of institution are found in the final chapter.

CHAPTER II

FINANCIAL ACCOUNTING

It is the purpose of this chapter to present a critical analysis of the data collected concerning the accounting system and the methods and devices employed in accounting for income, expenditures, assets, and liabilities of both educational and auxiliary activities. Recommendations for a more satisfactory accounting procedure will also be made when the evidence seems to justify such a procedure.

The Accounting System

Types of ledgers operated.- The data presented in Table II show the types of ledgers operated in connection with accounting in the colleges studied. A careful study of the entries in this table shows that there is a tendency in teachers colleges to maintain a general ledger and eliminate subsidiary ledgers or to operate subsidiary ledgers and eliminate the general ledger. Only six institutions which maintain a general ledger operate any type of subsidiary ledger, and in only four cases is the general ledger and any one subsidiary ledger operated. The accounting system which does not provide for both general and subsidiary ledgers eliminates the possibility of maintaining all the financial records needed by teachers colleges. Where the general ledger is not maintained no control accounts are operated for income, budget appropriations, unappropriated balances, and expenditures. As a result no ready check is available for such items. Subsidiary ledgers are also necessary in providing detailed records of financial transactions involving the budget and auxiliary activities, both of which are operated by the co-operating institutions. Without such records adequate financial administration is rendered exceedingly difficult. The accounting system, therefore, should provide for both general and subsidiary ledgers.

The general ledger and its operation.- An examination of the general ledgers referred to in Table II shows that many of them are very little more than books of accounts where expenditures are distributed. It also shows that there is wide variation in the accounts maintained in the general ledger with respect to both type and number. In fact, the variation is so great that it is practically impossible to make a classification of the accounts maintained in the general ledger. In the selection of

TABLE II
TYPES OF LEDGERS OPERATED BY SIXTEEN TEACHERS COLLEGES

Institutions	General Ledger	Budget Ledger	Subsidiary Ledger for Auxiliary Activities	Subsidiary Ledger for Agency Funds	Total
1.	X				1
2.		X	X	X	3
3.	X				1
4.	X			X	2
5.					0
6.					0
7.		X	X		2
8.					0
9.	X	X			2
10.		X	X	X	3
11.		X	X	X	3
12.	X	X			2
13.	X		X	X	3
14.	X				1
15.	X	X		X	3
16.	X	X		X	3
Total	9	8	5	7	

examples to be presented concerning both general ledger and budget accounts the writer has followed the policy, in so far as possible, of presenting average samples of charts of accounts. The accounts of institutions Number 13 and 1 have been selected for study since they show the wide variation, number, type, and organization of ledger accounts. The two lists also contain all the fund groups found in any other list of accounts.

The eight accounts maintained in the general ledger by institution Number 13 are as follows:

- Investment of state
- Garden account
- Residence-hall fund
- Incidental fund
- Cafeteria fund
- Cash account
- Interest
- Salary

An analysis of the foregoing list of accounts reveals the fact that there are two groups of funds represented, namely, current funds and plant funds. In defining funds the National Committee on Standard Reports for Institutions of Higher Educa-

tion¹ states that,

"The term 'fund' as used in this report includes all accounts of assets, liabilities, and proprietorship necessary to set forth the present state of a sum received for purposes of producing income, or a sum received or earned which is expendable for general purposes or for a specific purpose."

There has been no attempt made by institution Number 13 to organize its general ledger accounts into fund groups according to the foregoing definition. The detailed receipts and disbursements and a balance between the total of receipts and the total of disbursements are shown for each account but not for fund groups. In commenting on this phase of accounting Morey² states that, "Every fund or fund group is a separate accounting entity, and its accounts must balance and may be exhibited in balance sheet form." Funds are provided for general or specific purposes. The transaction concerning each fund, therefore, should be kept separate from the transactions of other funds in order that a strict accounting for each may be had. If this is not done it is difficult to make definite reports on the administration of the various funds operated. Lack of fund accounting is also likely to result in confusion and accusations of violations of trust. The general ledger, therefore, should carry an account for each fund group.

A further examination of the list of general ledger accounts maintained by institution Number 13 shows that there are no bank accounts corresponding to the fund groups represented. All colleges collect some cash which must be accounted for. The most convenient method of taking care of cash and of setting up working assets is through the banking system. This procedure also furnishes the best available protection for working assets. The general ledger should, therefore, carry a division devoted to depository accounts. Another defect is noted in the fact that the accounts do not present a complete picture of the funds represented; for example, no record is made of estimated income and appropriations in the current fund group. The lack of such records eliminates the possibility of checking the accuracy of income estimates from year to year.

The following list presents the accounts operated in the

¹Supplementary Suggestions Concerning Financial Report Forms. National Committee on Standard Reports for Institutions of Higher Education, Bulletin No. 8, p. 2. Chicago: Published by the Committee, (Mimeographed) May, 1933.

²Lloyd Morey, University and College Accounting, p. 26. New York: John Wiley and Sons, Inc., 1930.

general ledger by institution Number 1:

- Bank - Board of regents account
- Bank - Payroll account
- Bank - Working account
- Cash on hand for deposit
- Certificate
- Dishonored checks
- Plant assets
- New Library building
- Refundable deposits
- American Legion scholarship
- State comptroller account
- Surplus fund
- Departmental accounts
- Diplomas
- Dormitories
- Extension department
- Hospital account
- Interest on deposits
- Matriculation fees
- Miscellaneous receipts
- Miscellaneous items of repair and improvements
- Repairs, improvements and up-keep
- Library equipment
- Salaries, regular
- Salaries, contingent
- Salaries, summer
- Student activity

A comparison of this list of accounts with the list presented for institution Number 13 reveals several important differences as well as a few similarities. The first difference is noted in the number of accounts maintained. The foregoing list shows more than three times the number of general ledger accounts operated by institution Number 13. There is also wide variation in the account titles employed in the two institutions. An analysis of the latter list of accounts shows that two fund groups are represented which are not shown in the control accounts of institution Number 13, namely, loan funds and agency funds. These two funds are represented by the American Legion scholarship and the student activity accounts, respectively. Such differences in accounts render the collection of comparable financial figures practically impossible. The variations pointed out also indicate that some institutions are failing to show a complete and distinct picture of institutional revenue. This statement is also substantiated by the fact that neither of the two institutions have grouped

their accounts on the basis of funds. As a result the exact status of a definite fund is difficult to determine. It is noted that institution Number 1 has set up definite depository accounts, however.

The variations and defects revealed by an analysis of the foregoing accounts are similar to those found in the general ledger accounts maintained by other institutions. The analysis shows that a chart of general ledger accounts suitable for teachers colleges should provide for four distinct funds, namely, current funds, loan funds, plant funds, and agency funds. In addition, the general ledger should carry two other distinct divisions, one for depository accounts and one for estimated income and other necessary budget accounts.

General ledger accounts.- In order to clarify the foregoing suggestions regarding the accounts that should be maintained in the general ledger a chart of such accounts has been prepared. Morey¹ recommends that the general control accounts for funds show both assets and liabilities. This seems to be a valid recommendation since a complete picture of the fund cannot be shown unless both assets and liabilities are given. The following chart, therefore, has been arranged to show the assets and liabilities for each group of funds.

General Ledger Accounts

Depository Accounts

Depository accounts to be detailed in accordance
with the way the deposits are made

Budget Accounts

Estimated Income Accounts

Unappropriated Balance Account

Appropriations and Expenditures

Current Funds - Educational

Assets:

Petty Cash

Cash for educational purposes

In state treasury

In local banks

Accounts receivable

Inventories

Liabilities and net worth of funds:

Reserve for petty cash fund

Reserve for working capital

Appropriation balances

In state treasury

¹Ibid., p. 26.

In local banks
Accounts payable
Student deposits

Current Fund - Auxiliary Activities

Assets:

Cash in bank
Accounts receivable
Inventories

Liabilities and net worth of funds:
Reserve for working capital
Appropriation balances
Accounts payable
Student deposits

Loan Funds

Assets:

Cash in bank
Notes receivable

Liabilities and net worth of funds:
Cash available for loans
Student loans

Plant Fund - Unexpended

Assets:

Cash on deposit
In state treasury
In local banks

Liabilities and net worth of fund:
Accounts payable
Net worth of funds unexpended

Plant Funds - Permanent

Assets:

Land (a detailed list)
Buildings (a detailed list)
Library
Furniture and fixtures

Liabilities and net worth of fund:
Accounts payable
Net invested in plant

Agency Funds

Assets:

Cash in bank

Liabilities and net worth of funds:
Accounts payable
Reserve for agency funds

The types of accounts suggested are in agreement with the recommendations of the National Committee on Standard Reports for

Institutions of Higher Education.¹

The teachers colleges visited do not have endowment funds. If endowments should be built up in the future an appropriate division should be included in the general ledger accounts, where both assets and liabilities should be shown.

Subsidiary ledgers.- The data collected regarding the number of subsidiary ledgers operated by the sixteen teachers colleges included in this study were presented in Table II. The entries in that table show that three types of subsidiary ledgers are maintained, one each for budget accounts, auxiliary activities, and agency funds.

The data obtained from a study of the budget accounts operated in sixteen teachers colleges are exhibited in Table III. All fifteen institutions operate under a budget plan, and approximately 53 per cent maintain a set of accounts which provides a record of each detailed budget item. Such a procedure supplies definite information about the financial transactions concerning each budget appropriation. This information permits college authorities to set up a definite control over budget expenditures. As a result, budget administration becomes scientific. The reports needed by department heads and the chief executive should be in much greater detail than could be provided by a set of accounts which corresponds to main divisions of the budget. It would be exceedingly difficult to maintain a continuous check on the expenditures of detailed budget appropriations unless a separate record of each was maintained. Budget administration in the seven institutions, which do not operate detailed accounts, is merely guess work since it does not furnish a definite control over budget expenditures. Institutional policies must, to a certain extent, be based upon information derived from detailed income and cost analyses. Such studies cannot be made, however, unless detailed income and cost records are maintained. The interpretation of the data in Table II justifies the statement that all teachers colleges should operate a budget ledger which will provide a detailed record for each budget item.

The data in Table II showed that only five institutions operate a subsidiary ledger for auxiliary activities. The entire group of co-operating colleges, however, maintains some type of auxiliary enterprise, which fact indicates that the complexity of

¹Suggested Forms for Financial Reports of Colleges and Universities. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1931. P. 10.

TABLE III
TYPES OF BUDGET ACCOUNTS MAINTAINED IN
FIFTEEN TEACHERS COLLEGES

Types of Accounts	Number of Institutions
Detailed items of the budget.	8
A few accounts arbitrarily selected	4
Main headings of the budget	3

an adequate accounting system for the co-operating colleges warrants the operation of subsidiary ledgers. There is a tendency in teachers colleges to record the income and expenditures of auxiliary activities in the accounts and books maintained for other activities. Such a procedure results in a meaningless record in so far as the separate activities involved are concerned. One of the chief characteristics of an auxiliary activity is the fact that it is supposed to be self-supporting. To determine this fact, however, it is necessary to maintain a record that will show the exact income and expenditures for each enterprise. This can be accomplished most satisfactorily by the use of a subsidiary ledger which devotes a definite section to the accounts of each activity operated. The practice of maintaining mixed accounts, therefore, is unsatisfactory.

A further examination of Table II showed that seven institutions operate a subsidiary ledger for agency funds or funds which do not belong to the institution but are supervised by it. The remaining nine institutions do not exercise any supervision over funds belonging to student organizations, although several presidents indicated that it should be done. Common sense dictates that the record of such funds should be entirely separate from the records of institutional funds. The total of the funds belonging to student organizations is usually small, but the detailed transactions may be so many that they become burdensome if an attempt is made to care for them in a separate section of the general ledger. Use of a subsidiary ledger for recording the transactions of agency funds is recommended.

The classification of budget accounts.- A study of the budget accounts in fifteen teachers colleges shows wide variation in the accounts maintained and in the items under which the budget estimates are compiled. There is also a great difference in the organization employed in setting up the budget accounts. Examples of accounts taken from the books of certain institutions will

make the foregoing statements clear. The following list of accounts is operated by institution Number 16.

- Biology
- Campus expenditures
- Campus cabins
- Car and truck
- Chemistry and physics
- Commercial department
- Diplomas
- Domestic Science
- Dormitories: supplies and equipment
- Dormitory receipts
- Deficit and gain account
- Education department
- Entertainment
- Freight, drayage, and express
- Fuel
- Furniture and fixtures
- General appropriation
- Grant County income
- Grant County Library fund
- Heating plant special appropriation
- High School department
- History department
- Incidental fees
- Insurance
- Institute fees
- Interest
- Janitors' supplies
- Kindergarten department
- Labor
- Land income
- Library expenses
- Library reference
- Library rents
- Library sales
- Light and power
- Manual arts department
- Matriculation fees
- Miscellaneous income
- Music department
- Mustang (paper)
- Notes payable
- Office expenses
- Permanent improvements

Physics and mathematics department
Printing
Psychology
Real estate
Regents
Repairs
Salaries
Student loan fund
Telephone and telegraph
Traveling expenses
Training school
Tuition
Vouchers payable
Water

The foregoing alphabetical arrangement of the accounts was used by the institution. An examination of the items in the list shows that no attempt has been made to employ any definite grouping of the accounts. The present organization does not even provide for a separation of the income and the expenditure accounts. Many of the titles of the accounts are so indefinite that they do not indicate the nature of the expense included. It would also be very difficult to determine the cost of any given function, such as instruction, under the present organization of the accounts.

The budget accounts maintained by institution Number 11 are presented in the following list:

Receipts:

- I. Balance for 1930-31
- II. Appropriation for 1931-32
- III. Receipts from swamp lands
- IV. Miscellaneous receipts

Expenditures:

- I. Salaries and Wages
- II. Travel and subsistence
- III. Office expenses:
 1. Stationery and office supplies
 2. Printing, binding, and school programs
 3. Postage
 4. Telephone and telegraph
 5. Freight, express, and drayage
 6. Repairs
 7. Memberships
- IV. Bonds and insurance premiums
- V. Medical supplies
- VI. Educational:

1. Salaries
2. Textbooks
3. Library
4. School-room supplies
5. Special departments
 - a. Manual Arts
 - b. Drawing
 - c. Music
 - d. Home Economics
 - e. Physical Education
6. Campus Schools
 - a. Elementary
 - b. Upper Grades
 - c. Office
 - d. Music
 - e. Miscellaneous
7. Laboratory supplies
 - a. Hygiene and chemistry
 - b. Biology and nature study
 - c. Geography
8. Lectures and entertainments
9. Merchandise (for resale)
10. Club work and annuals
- VII. Operation of plant
 1. Salaries and wages
 2. Fuel
 3. Light, water, gas, and power
 4. Janitors' supplies

A comparison of the accounts in the first and second lists shows wide variation in the organization used. In the latter the income and expenditure accounts have been definitely separated. Instead of listing the budget accounts in alphabetical order, as is done in institution Number 16, the accounts operated by institution Number 11 are classified under seven main headings. The headings are selected for the most part on an object basis such as salaries and wages, bonds and insurance premiums, and medical supplies. Two of the main headings, educational expenditures and operation of plant, are based on a functional classification. The title "Educational" is entirely too broad to be of much value, however. It is difficult to justify the inclusion of a separate account for special departments such as music, and omit other departments such as history or mathematics. An inconsistency in the accounts is noted in the fact that salaries and wages is a major classification in one case and appears also as a sub-heading under two other major classifications.

An exhibit of the budget accounts maintained by one other institution will be sufficient to illustrate the variations in both organization and types of accounts set up by the institutions included in this study. The example will also be sufficient to show that budget accounts as now operated are defective in many respects. The following list presents the accounts maintained by institution Number 14.

Income:

- I. Salaries and wages
- II. Maintenance
- III. Repairs and permanent improvements
- IV. President's contingent fund
- V. Heating plant repairs and equipment
- VI. Generator and switch-board equipment
- VII. Revolving fund
- VIII. Student fees
- IX. Student activity
- X. Interest

Expenditures:

- I. Salaries:
 - 1. Instructional
 - 2. Executive
 - 3. Clerical
 - 4. Labor and unclassified
- II. General expenses:
 - 1. Travel
 - 2. Postage, telephone, and telegraph
 - 3. Stationery and office supplies
 - 4. Freight and express
 - 5. Publications
 - 6. Miscellaneous
- III. Operating expenses:
 - 1. Repairs
 - 2. Heat, light, water, and power
 - 3. Chemical and laboratory supplies
 - 4. Feeding stuff
 - 5. Laundry
 - 6. Chapel lectures
 - 7. Miscellaneous supplies
- IV. Special:
 - 1. Cafeteria
 - 2. Dormitory, etc.
- V. Capital additions:
 - 1. Scientific apparatus
 - 2. Furniture and office equipment

3. Library
4. Machinery and tools
5. Specimen and collections
6. Buildings
7. Land

An examination of the accounts exhibited shows that the main headings agree with the accounts maintained by institution Number 11 in only two instances, namely, the salary account and the operating expenses. A further study of the accounts listed under operating expenses shows that there is very little agreement in the sub-headings listed under this account in the two institutions represented. The organization employed in setting up the accounts is also different. In institution Number 11 expenditures for postage, telephone, and telegraph are grouped with office expenses, while in institution Number 14 these expenditures are grouped with general expenses. Expenditures for repairs are classified as office expenses in Number 11, while institution Number 14 places this account under operating expenses. Many other differences could be cited, but the foregoing examples are sufficient to show the almost complete lack of agreement in budget accounts in the three lists presented. The variation is just as great in the accounts of other institutions. The evils of such a condition were pointed out in a discussion of the variation of general ledger accounts in the sixteen colleges.¹

The budget accounts operated by institution Number 14 have the most logical organization of either of the three lists cited. There are, however, a few serious defects in this chart. First, the various functions for which expenditures are made are not completely provided for; second, the income from auxiliary activities is not separated from other income; third, no provision has been made for the organization units of the institution; and fourth, many of the sub-headings are not properly classified. For example, "feeding stuff" should be classified as supplies under the department of agriculture instead of operating expenses. Such defects as have been pointed out greatly reduce the service which a set of budget accounts should render college administrators. The internal organization of teachers colleges provides for definitely organized units or departments. Common sense dictates that the administrative units are the living elements of the college that must be supervised, checked, and directed through a series of activities if the objectives of the institution are to be realized. The financial recording system, therefore, must be so organized and installed that it will provide the information

¹See page 13.

needed, in whatever detail required, in formulating policies, guiding activities, and checking the accomplishment of each department. The accounting system cannot provide the necessary information, however, where the organization units have not been recognized in setting up the budget accounts. The foregoing statements are also applicable to the various functions performed by the institution. The facts needed in financial administration must be accurate if they are to render maximum service. Such facts cannot be obtained from a set of accounts where gross misclassification of expenditures exists, however.

An analysis of the budget accounts presented in the foregoing lists justifies the conclusion that if comparable cost figures relating to teacher training are ever to be had there is need for more uniform accounting in teachers colleges. There is also need for a more exact classification of the detailed expense items, if the accounts are to render maximum service in financial administration.

Income accounts.- For the purpose of determining a basis which may be employed in setting up a chart of income accounts suitable for teachers colleges, a frequency distribution of the accounts maintained in connection with governmental appropriations has been made. An examination of the entries in Table IV shows two important facts. First, judging from the standpoint of use the appropriations account is the most important item listed, and it is classified on the basis of the source from which the income is derived. Many of the other accounts, such as operation of plant, maintenance, and repairs and improvements, are based on funds which have been set up from state appropriations for a certain purpose. Second, the majority of the accounts listed represent income for strictly educational purposes, while some represent income that is to be devoted to capital purposes. Salaries and wages, general control, and instruction accounts represent funds which are to be devoted to educational purposes, while additions to land, paving, and generator and switch-board equipment represent capital outlay. If income accounts for governmental appropriations are to be completely self-explanatory they should be classified (1) according to the purpose for which they are appropriated; (2) on the basis of source; and (3) according to the fund that is to benefit from each source.

Teachers colleges derive income from sources other than governmental appropriations. The data obtained concerning the accounts maintained for local income are presented in Table V. It is noted that the accounts exhibited are classified on the basis of source and that three types of funds are represented, namely, current educational funds, agency funds, and revolving

TABLE IV

INCOME ACCOUNTS MAINTAINED IN CONNECTION WITH
GOVERNMENTAL APPROPRIATIONS IN FIFTEEN
TEACHERS COLLEGES

Accounts	Number of Institutions
Appropriations.	10
Operation of the plant.	3
Salaries and wages.	3
Maintenance	3
Repairs and improvements.	3
Receipts from land.	3
Heating plant repairs and equipment	3
General control	2
Additions to land	2
Educational purpose	1
Extension service	1
Branch summer school.	1
Contingent fund	1
County income	1
Paving.	1
Additions	1
Instruction	1
Library	1
Student welfare	1
Generator and switch-board equipment.	1

funds or funds derived from auxiliary activities. An analysis of the foregoing facts shows that accounts for local income require the same organization and classification as the accounts for state income. On the basis of the foregoing evidence a chart of income accounts has been designed to meet the needs of the colleges included in the study, and which at the same time provides a uniform system of accounting for income.

A. Educational and general

I. Public appropriations

Detail in accordance with funds to which appropriations are made

II. Student fees

III. Interest on deposits

IV. Rents and sales

V. Other accounts for local income

B. Auxiliary enterprises and activities

I. Residence halls (an account for each)

II. Cafeteria and dining-rooms

III. Hospital and infirmary

IV. Athletics

TABLE V

ACCOUNTS MAINTAINED FOR LOCAL INCOME IN
FIFTEEN TEACHERS COLLEGES

Accounts	Number of Institutions
Miscellaneous sources	8
Revolving fund.	6
Student fees.	5
Interest on daily balances.	5
Dormitory	5
Student activity.	5
Extension department and book fund.	4
Matriculation fee	3
Departmental fees and fines	3
Hospital fees	3
Athletics	2
Library fines	2
Cafeteria and dining room	2
Incidental fees	2
Institute fees.	2
Text book rental.	2
Tuition	2
Special instruction fees.	1
Graduation fees	1
Placement bureau fees	1
Music fee	1
Gymnasium fees.	1
Auditorium rental	1
College store	1
Laundry	1
Multigraph department	1
Campus cabins	1
College paper fees.	1
Laboratory fees	1

V. Multigraph

VI. Laundry

VII. Other activities

C. Capital funds

I. Public appropriations

1. Special appropriations (a separate account
for each)

Expenditure accounts.- A previous discussion indicates that the best method of setting up a chart of expenditure accounts for teachers colleges is to employ a classification based on a functional-organization unit.¹ This position is also

¹See page 22.

sanctioned by an outstanding authority in the field of public finance. In discussing the problem of classifying governmental expenditures Lutz¹ states that there are five possible procedures.

"The first of these is the functional analysis, the object of which, when properly constructed, is to tell what the government is doing, that is, to set forth the nature of the activities and duties undertaken by it. A second method is to classify expenditures according to the organization units, that is, the departments, bureaus, divisions and institutions, which are actually spending the money. The method reveals who is doing certain things. It has the merit of fixing more definite responsibility for the actual disbursements upon the officials or organizations which make them....A third method is classification by the objects of expenditure, by which is meant an analysis of the disbursements according to the objects actually purchased, such as fuel, labor services, repairs, insurance, new equipment, etc.....A fourth method would reveal the character of the expenditure, by which it would be possible to distinguish between current expenses, fixed charges and capital outlays. Finally, the classification might follow the funds which have been set up in the appropriation acts, and indicate the transactions which have taken place in each.... fund accounting has its legal justification, but when made the sole method of reporting public financial transactions, it inevitably enshrouds the whole matter....

From the standpoint of popular judgment on public policy the functional arrangement is best, while from that of definite location of administration responsibility for results, the classification by organization units is most satisfactory." It is recognized that there is some difference in public finance and teachers college finance; there is a great deal of similarity, however. For example, both the college and the governmental departments are supported mainly from public funds. They must also report to certain governmental agencies. The discussion is applicable to teachers college finance. The functional and organization units, therefore, have been used as a basis in analyzing the accounts of fifteen institutions for the purpose of obtaining the information needed in setting up a suitable system of accounts. The data obtained are presented in Appendix B, Tables LXII to LXVI, inclusive. The following chart of accounts is based upon the facts found in these tables.

¹Harley Leist Lutz, Public Finance, pp. 34-5. New York: D. Appleton and Company, 1932.

Chart of Budget Accounts

A. Educational and General

I. Administration and general expenses

1. Administration

a) Salaries

(1) Administrative staff

(2) Clerical assistants

b) Equipment and supplies

c) Postage, telephone, and telegraph

d) Printing (forms, letter-heads, etc.)

e) Freight, express, and drayage (covering
office supplies and equipment

f) Travel

g) Audit

2. General

a) Catalogues, bulletins, and publicity

b) Burglary insurance

c) Educational conferences and special
lecturers

d) Placement bureau

e) Association fees

f) Commencement

g) Entertainment, and social welfare

h) Miscellaneous equipment and expenses (such
as a car furnished by the state)

II. Instruction

1. Academic deans

a) Salaries

b) Clerical assistance

c) Equipment and supplies

d) Postage, telephone, and telegraph

2. Agriculture

a) Salaries

b) Equipment

c) Supplies

d) Travel

3. Other departments as provided in the institu-
tional organization

III. Extension service

1. Salaries

a) Instructional staff

b) Clerical assistance

2. Library service

3. Supplies

4. Printing and mimeographing

- 5. Travel
- 6. Postage
- IV. Library service
 - 1. Salaries
 - a) Regular staff
 - b) Student assistants
 - 2. Books
 - 3. Magazines
 - 4. Equipment and supplies
 - 5. Binding
 - 6. Postage
- V. Operation and maintenance of physical plant
 - 1. Salaries and wages
 - 2. Fuel, light, water, and power
 - 3. Equipment and supplies
 - 4. Care of buildings
 - 5. Repair of buildings
 - 6. Care and maintenance of grounds
 - 7. Transportation expense
 - 8. Property insurance
 - 9. Other expenses
- B. Auxiliary Activities
 - I. An account for each activity operated
- C. Other Non-Educational Expenses
 - I. Scholarships and prizes
 - II. Interest on indebtedness
 - III. Other non-educational expenses

It would be impractical to assume that each institution should maintain exactly the same number and classification of sub-divisions in its chart of accounts since colleges of the same general type differ in so many ways. The main headings, however, should be uniform, while the sub-headings should be modified when necessary so as to meet local conditions. For example, the administrative organization of institution Number 7 does not provide for an academic dean. There would be no need, therefore, for the first group of accounts listed under instruction. Institution Number 2, however, can utilize the foregoing group of accounts to good advantage.

Other books and devices of accounting.- There is a need for financial records which show many facts concerning business transactions that are not usually shown in the general or the subsidiary ledgers. For example, an examination of a ledger reveals certain entries which have been made to a particular account. These entries were probably made at the end of the month. It was necessary to prepare a record at the time the transaction

was completed, however, which indicated the proper distribution of the expenditure in order that the appropriate entry might be made in the ledger. The detailed information referred to is recorded in books of original entry. The data collected concerning records of the original entry type are presented in Table VI. The entries in this table show that considerable prominence is given

TABLE VI

BOOKS AND RECORDS OF ORIGINAL ENTRY OPERATED
IN SIXTEEN TEACHERS COLLEGES

Books and Records	Number of Institutions
A system of duplicate receipts.	16
Voucher register.	13
Cash book	11
Both cash receipt and disbursement books.	6
One cash book	5
General journal	7
Pay-roll register	6
Check register.	2

to the use of the duplicate receipt. The wide spread use of a system of duplicate receipts is due, in part at least, to state requirements. Blank receipt forms are issued in many cases to the college by the state office. Each receipt is numbered and must be satisfactorily accounted for. An examination of a form employed by institution Number 1 reveals the merits of a duplicate receipt. This form was selected for presentation because it is representative of the receipt forms employed by the colleges. The form exhibited in Figure 1 shows the date, the name of the person making the payment, the amount of the payment, and the

REGISTRATION RECEIPT

Date _____ No. 8121

NAME OF COLLEGE _____ Has Received

From _____ Address _____

In Payment of the Following Items:

Matriculation Fee---\$_____ Hospital Fee-----\$_____

Refundable Deposits---\$_____ Optional Fee-----\$_____ \$ _____

Chemistry---\$_____ (_____) Commercial Lab.--\$_____ (_____) _____

Music---\$_____ (_____) Public Speaking--\$_____ (_____) a/c No.140

By _____

For the College _____

Fig. 1.- Registration receipt blank used by institution
Number 1.

distribution of the amount to the appropriate accounts. The number shown on the receipt was assigned to the copy of the form by state officials. There are several values of such a record. First, it furnishes a definite check against the money collected. Second, it provides the only authoritative record for accountants in making the appropriate entries in the various books of accounting. Third, registration receipts may be checked against enrollment records to determine if all fees have been paid. Fourth, it provides a convenient means of checking the accuracy of the income accounts by state auditors. The form presented in Figure 1 has one outstanding defect, however. It is used only for student fees. Its use, therefore, will necessitate the operation of another form for other items of income. It would be a better procedure to employ one general form for all items of income. The general receipt forms usually provide for the distribution of cash receipts by account numbers instead of by a list of accounts. The value of the receipt, however, would be the same. The utility of the duplicate receipt justifies the state in requiring its use by all state institutions.

The data in Table VI show that thirteen institutions operate a voucher register. Figure 2 presents a duplicate of the voucher register form employed by institution Number 3. This form has been selected for discussion because it exhibits the essential characteristics of the register forms employed by the colleges; in other words, the information that may be recorded on this register form is similar to that provided by the forms employed in other institutions. The voucher register shows a complete record of all vouchers drawn when the vouchers issued each day are brought together, classified according to funds and accounts, and entered in this book of accounting. When the warrant or check has been issued and the proper entry made in the voucher register, a record of actual disbursements is provided. The voucher register, therefore, supplies a record of all vouchers which encumber an account and the commitments which have been liquidated. This book of accounting also contains a distribution of expenditures from which other books of accounting may be posted. The voucher register provides a very important record of financial transactions.

According to the data presented in Table VI eleven institutions operate a cash book, and six of the eleven institutions operate a cash-disbursement book in addition to the cash-receipt book. An examination of a portion of the form used by institution Number 7 reveals the nature of the record maintained in a combination cash-receipt and disbursement book. This form is presented because of its typical characteristics, while only a portion

REGISTER OF VOUCHERS PAID FROM STATE APPROPRIATIONS

Page No.

MONTH YEAR

[illegible]

Fig. 2.- Voucher register form used in Institution Number 3.

of the original is exhibited because the remainder contained no additional features. An examination of Figure 3 shows that the form presented provides space for the date, explanation of the

NAME OF COLLEGE

CASH BOOK - LOCAL FUND

Date	Explanation	Voucher Number	Student Activities	
			Cr.	Dr.

Fig. 3.- A portion of the form used in the cash book of institution Number 7.

receipt or expenditure, voucher number, and a debit or credit entry to the account. Only one account is shown but the form contains six other accounts. The cash book, therefore, provides for the distribution of cash receipts and disbursements to the appropriate accounts. In institutions where all disbursements are made by means of a voucher system, there is nothing to be gained by operating a cash-disbursement book. In fact, the voucher register is to be preferred. The cash-disbursement book provides a record of expenditures actually consummated. The voucher register makes provision for the same record and, in addition, it provides a record of all voucher encumbrances. Since thirteen of the institutions employ a voucher system, the cash-disbursement book appears to be an unnecessary book of accounting. The cash-receipt book should be operated since it contains information which is not shown in any other book of accounting.

Seven of the sixteen institutions operate a general journal. The data regarding the purpose of operating this book

of accounting are presented in Table VII. The purposes presented were determined by asking business managers the direct question, "What purposes does the journal serve?" A check list was not

TABLE VII
PURPOSES OF OPERATING A GENERAL JOURNAL AS STATED
BY SEVEN TEACHERS COLLEGES

Purposes	Number of Institutions
Serves as a book for collecting totals of expenditures and making appropriate distributions. . . .	5
Serves as a book for opening new accounts at the beginning of the year	2
Serves as a place for listing bills which have been passed for payment	1

employed. The entries in this table show that three purposes of the general journal were given. Five of the seven colleges that use a journal state that this book of accounting serves as a place where totals of expenditures are collected and distributed to the appropriate accounts. The figures in the journal then are used in posting the general ledger. Two institutions use a journal for opening accounts at the beginning of the school year, and one uses this book of accounting for the purpose of listing bills which have been passed for payment each month. The last purpose represents a misuse of a journal. Time and effort can be saved by filing a duplicate copy of the bills passed. There is also no justification for maintaining a general journal if it is to be used only for opening accounts at the beginning of the year or for the distribution of expenditures and the posting of other books of accounting. The voucher register which is operated by practically all institutions will serve the foregoing purposes. There are functions of the general journal, however, which it seems have not been recognized by the colleges included in this study, and which cannot be cared for to the best advantage by the voucher register. The budgetary accounts recommended have been classified according to function. Such a classification makes possible an accurate computation of educational costs according to function. An analysis of the cost of the various functional divisions, however, involves the allocation of certain expenditures to the various functions. For example, if a study of the cost of administration is to be made, it is evident that the total cost of business management should not be included if

the financial transactions of auxiliary activities and student organizations are conducted through the business office. Certain accounts of auxiliary activities and student organizations should be debited and certain administrative accounts should be credited with the amounts allocated. Such debits and credits should be made through journal entries instead of using a voucher which would necessitate carrying the entries through the entire system. No account receives any actual cash in such an allocation. There would be nothing gained, therefore, in recording such facts in the cash book. Such information is not considered in the annual audit; neither is it included in the monthly report which is used for administrative purposes. There are other types of financial adjustments which can be cared for best by journal entries. For example, it sometimes happens that students are overcharged; a correction in the accounts should be made through the general journal. Interdepartmental transfers should also be cared for by journal entries. There is usually a number of business transactions which cannot be cared for readily by other books of the original entry type because of their special or unusual nature. The importance of such adjustments and the recording of special transactions justify the maintenance of the journal. The accounting systems of the nine institutions which do not operate a journal would be materially strengthened by the addition of this book of accounting. An adjustment of financial transactions is usually of primary importance, and an explanation of it should be so carefully prepared that there is no possibility of losing its identity.

The entries in Table VI revealed the fact that six institutions operate a pay-roll register. The methods used in paying employees are shown in Table VIII. The entries in this table show that the majority of institutions satisfy pay-roll obligations by the use of voucher checks. This means that such expenditures are accounted for by entries in the voucher register just the same as other expenditures. In small institutions where the employees are comparatively few the voucher register may care for both general and salary expenditures. In larger institutions, however, the pay-roll register should be used to relieve the voucher register of the burden of caring for a large pay-roll. The pay-roll register will also facilitate the accounting procedure. Since the commitments are made in advance, the pay-roll and vouchers may be prepared at any time during the month when time is available, and the vouchers entered on the pay-roll register. This book of accounting also brings together a body of financial information which is very useful to administrative officers. The pay-roll is of such size and importance in the

TABLE VIII
METHODS USED IN PAYING EMPLOYEES IN
SIXTEEN TEACHERS COLLEGES

Method	Number of Institutions
Voucher check	10
Warrant	4
Local check	2

colleges included in the present study as to justify the conclusion that a pay-roll register should be employed.

Two institutions report the use of check registers. The reason for the operation of so few check registers is obvious since practically all the institutions are required by law to use some form of a voucher system. This is true even of local funds. The data collected by a study of only two cases are not sufficient to justify a conclusion regarding the value of this book of accounting.

Accounting for Income

General procedure in accounting for income.- The data collected concerning the general procedure in accounting for income reveal that eleven of the fifteen institutions maintain a separate account for each source of income. The other four combine some of the accounts. The value of operating a separate account for each source of income lies in the fact that this procedure provides needed information in preparing estimates of income budgets. Such a set of records also provides information which is readily accessible for the preparation of reports on income that may be used in financial administration. The facts needed in making estimates and reports of income are difficult if not impossible to secure from an account which combines the income from all sources. Some income cannot be used for general purposes, which fact makes it advisable to provide separate accounts for different types of revenue.

Accounting for state appropriations.- The procedure followed in accounting for appropriations is materially affected by the practice of turning state funds over to the institution or by leaving them in the state treasury. If the money is deposited in the state treasury the local accounting system must provide an account with this department, and if such funds are turned over to the institution the accounting may be done by employing

cash and depository accounts. The data in Table IX show that there is a tendency on the part of state officials to leave appropriations in the state treasury. The local business office,

TABLE IX
THE DISPOSITION OF APPROPRIATIONS BY THE STATE AND
THE REALIZATION OF INCOME FROM STATE
APPROPRIATIONS BY THE COLLEGE

Disposition of Appropriations and Realization of Income	Number of Institutions	
	Distribution	Total
Disposition of appropriations:		16
Appropriations are not turned over to the institution	13	
One-twelfth of appropriations turned over to institution each month.	2	
Appropriations are turned over to the institution	1	
Realization of income:		15
Income realized by vouchering state	13	
Income realized by presenting claims to state	2	

therefore, should maintain two accounts with the state, namely, an estimated income account and a state appropriation account. The first should be debited with the amount of the estimate and the second credited with the amount of the appropriation. As the result of a state requirement, income from appropriations is realized by the local institution through the use of a voucher. This medium of financial transaction, therefore, becomes the sole authority for all entries made in accounting for the income actually received. The monthly totals of the vouchers approved should be entered in the general ledger as a credit to estimated income from the state appropriation account and as a debit to the appropriation account. The voucher also provides the necessary information for the proper distribution of income to the various budget items.

Accounting for local income.- Accounting for local income involves the collection of such revenue, a responsibility which is not connected with state appropriations. Table VI showed that each of the colleges employs some form of a duplicate receipt in the collection of fees. Since the collection of local revenue involves a cash instead of a paper transaction, the en-

tries should be made in the cash book instead of the voucher register. The receipt furnishes the information which makes a distribution of the income to the appropriate account possible.

Six institutions stated that income is received from cash sales. The method of handling such transactions in this group of colleges is very inadequate. In no case are sales tickets provided for those in charge of the sales, and in some cases reports of sales are made to the business office only once a term. The report is based on note-book memoranda or the cash collected is merely turned over to the business manager and no detailed report is made. In one case, where educational tests are sold, a duplicate bill for each sale is forwarded to the business office. The method of handling cash sales in most institutions provides an opportunity for many errors. The proper safeguards for the revenue derived from cash sales are not provided by such procedures, and the business office is not supplied with the records needed in properly accounting for this type of income. A sales ticket should be provided for such purposes. Since there are three individuals interested in the transaction, the sales ticket should be made in triplicate, and in order to account for the tickets more easily they should be serially numbered and bound in a small book. The ticket should show the date since this information is needed for future reference in all transactions. In order to identify the transaction more completely the ticket should give the name of the purchaser and the name of the article purchased. The income from the sale is usually credited to some departmental account. It is necessary, therefore, for the ticket to show the name of the department making the sale. In order that the proper amount may be entered to the account the quantity, the unit price, and the total amount should be shown. The last named items also provide a check on the money collected. If the ticket is to show that the transaction has been properly completed, it should be so ruled as to provide a place for the signature of both the salesman and the business manager.

The data concerning the accounting for income after the collections have been made are presented in Table X. The majority of institutions post the cash collected to the cash book. The entries in the cash book are either made in totals or they are distributed to appropriate accounts. If the entries are made in totals a distribution is then made in the general journal. At the end of the month the general ledger is posted from the cash book or the general journal. The foregoing procedure provides a complete record of income and enables college authorities to determine at any time the amount of revenue belonging to each fund.

TABLE X

PROCEDURE FOLLOWED IN ACCOUNTING FOR CASH COLLECTED
IN SIXTEEN TEACHERS COLLEGES

Procedure Followed	Number of Institutions
Post to cash book	11
Post general ledger from cash book or journal . . .	7
Deposit funds and enter amount in bank account. . .	6
Enter to fee register	1

In six institutions, however, the cash collected is deposited and the amount entered to the bank account. This procedure does not provide a record of the income that belongs to the various funds. An exact financial control over fund accounts, therefore, is difficult to establish. An accounting procedure which recognizes the funds involved is recommended for teachers colleges.

Accounting for Expenditures

Types of expenditures.- A study of the financial transactions and the records involved in accounting for the liquidation of financial obligations in sixteen teachers colleges shows that expenditures may be classified into two general groups for the purpose of analysis and discussion, namely, one on the basis of origin, and one according to the method of liquidation. Both methods of classification reveal facts which are essential to a thorough understanding of the process involved in expending and accounting for institutional funds. Such classifications are presented in Table XI. An examination of the entries in this table shows that when expenses are classified on the basis of origin three general sources may be identified. All the institutions studied incur financial obligations which originate through requisitions, through pay-rolls or pay-roll vouchers, and through expense vouchers. When expenditures are analyzed on the basis of the method of liquidation, two sub-groups are identified, namely, cash disbursements, and interdepartmental transfers. The evidence presented in Table XI shows that all institutions have each general type of expenditure. This aids in setting up a uniform plan of handling the expenditure accounts.

The administration of expenditures which originate through requisitions.- The data obtained from sixteen teachers colleges regarding the administration of expenditures which originate through the use of a requisition are presented in Table XII. The

TABLE XI

A CLASSIFICATION OF EXPENDITURES IN SIXTEEN
TEACHERS COLLEGES ACCORDING TO ORIGIN
AND THE METHOD OF LIQUIDATION USED

Institution	Classification on the Basis of Origin			Classification on the Basis of Method of Liquidation	
	Expenditures Which Originate through Requisitions	Expenditures Which Originate through Pay-Rolls	Expenditures Which Originate through Expense Vouchers	Cash disbursements	Interdepartmental transfers
1. .	X	X	X	X	
2. .	X	X	X	X	
3. .	X	X	X	X	
4. .	X	X	X	X	
5. .	X	X	X	X	
6. .	X	X	X	X	
7. .	X	X	X	X	
8. .	X	X	X	X	
9. .	X	X	X	X	
10. .	X	X	X	X	
11. .	X	X	X	X	
12. .	X	X	X	X	
13. .	X	X	X	X	
14. .	X	X	X	X	
15. .	X	X	X	X	
16. .	X	X	X	X	
Total	16	16	16	16	6

items presented in this table show several variations in procedure. The first one of importance is noted in connection with the approval of the requisition. Some institutions require the approval of the president, while others require only the signature of the business manager. An analysis of this situation shows that it is necessary for the business office to handle each requisition for the purpose of checking it against the departmental account. If this is not done budget commitments may be made which cannot be liquidated. The president sanctioned the expenditure of a certain amount of money when he approved the departmental budget. A second approval by the chief executive is not necessary, and if relieved of this routine the president is left free to direct his attention to more important duties. If a requisition calls for a decision concerning both

TABLE XII

STEPS IN THE ADMINISTRATION OF EXPENDITURES WHICH ORIGINATE
THROUGH THE USE OF A REQUISITION IN
SIXTEEN TEACHERS COLLEGES

Administrative Steps	Number of Institutions	
	Distribution	Total
Preparation and endorsement of requisitions		16
Department head	13	
Business manager.	3	
Checking the availability of funds to cover requisitions.		15
Business manager.	15	
Approval of requisition		16
President	11	
Business manager.	3	
President and business manager.	2	
Preparation of purchase order		16
Local business manager.	8	
State officials	8	
Check and approve invoice		16
Officials in business office.	8	
Department heads.	8	
Preparation of voucher to cover order received.		16
Business manager.	13	
State officials	3	
Preparation of check or warrant		16
State officials	12	
Business manager.	4	

educational and financial affairs it should be passed to the president for his approval, for the business manager has no authority to pass on such questions.

The remaining variations noted in Table XII are due to state regulations. On the whole, the administrative steps relating to expenditures are very distinct, and the procedures followed are more or less uniform.

Expenses which originate through a pay-roll.- An examination of the data in Table XI shows that certain expenditures in this group of colleges originate through the use of pay-roll

vouchers. The local business manager prepares the voucher and presents it to the state finance department where the warrants or checks are issued. The amount of the voucher is entered in the pay-roll register and the appropriate distributions are made to the budget accounts. The general ledger accounts may also be posted from the pay-roll register. There is no inherent difficulty in accounting for expenditures which originate through pay-rolls that would justify a great deviation from an adequate, uniform system of accounting.

Expenditures which originate through expense vouchers.-

As has been shown, certain expenditures in teachers colleges originate through the use of expense vouchers. These expenditures cover the traveling done by the president and other faculty members in the interest of the institution. After the expense voucher has been issued, the procedure for drawing the warrant or check and accounting for the expenditure is the same as that for the pay-roll voucher.

Accounting for cash disbursements.- A study of the procedure followed by the co-operating colleges in liquidating financial obligations and in accounting for the financial transactions involved reveals the fact that certain forms and books of the original entry type are employed. A treatment of such books of accounting was presented in another connection.¹ An examination of the entries in Table XIII shows that the voucher is the most important form used in accounting for cash disbursements.

Table XIV shows that six reasons are offered by this group of teachers colleges for operating a voucher system. An examination of the data shows that two reasons stand out above all others. First, it is a state requirement, and second, the voucher insures an itemized record of the financial transaction. The business managers of four institutions offer no reason other than a state requirement for using the voucher system.

Any accounting device such as the voucher should be used on the basis of its own merits, and if it offers no advantages, its use should be discontinued. The voucher form exhibited in Figure 4 is now in use in institution Number 12. An analysis of this form shows that it has many desirable features which are of real value in the accounting procedure; for example, the department for which the obligation is incurred is given. The name of the department assists in the distribution of the charges to the proper accounts. Both the firm and college order numbers are shown, a fact which assists in auditing accounts when it is necessary to trace expenditures. The body of the voucher provides

¹See page 28.

TABLE XIII

FORMS OF THE ORIGINAL ENTRY TYPE USED IN LIQUIDATING
FINANCIAL OBLIGATIONS AND ACCOUNTING FOR CASH
DISBURSEMENTS IN SIXTEEN TEACHERS COLLEGES

Institution	Forms Used	
	Voucher	Claim
1.	X	
2.	X	
3.	X	
4.	X	 X
5.	X	
6.	X	
7.		
8.	X	
9.	X	
10.	X	
11.	X	
12.	X	
13.		
14.	X	
15.		 X
16.	X	
Total	13	2

space for the number of articles, the name of the items, the price, the discount, and the net amount. These facts provide a satisfactory record of purchases made. The discount column shown in this form was not included in the vouchers used by the majority of institutions. Unless a record is made of discounts received, however, there is no way of determining how much has been saved. It appears desirable, therefore, to provide space for discounts in all voucher forms. A further examination of the voucher form presented in Figure 4 shows that the expenditure is classified according to the account to be charged and the fund out of which the expenditure is to be made. This procedure aids materially in posting both fund and expenditure accounts. There is also space for the check or warrant number which, when dated, shows that the bill has been paid, and aids in tracing expenditures when it is desirable to do so.

A study of the information derived from an analysis of the voucher form presented in Figure 4 reveals three important facts that are in harmony with items two, three, and four listed in Table XIV under reasons offered for operating a voucher system. First, the voucher provides information which facilitates

TABLE XIV
REASONS OFFERED BY FOURTEEN INSTITUTIONS FOR OPERATING A VOUCHER SYSTEM

Reasons Offered	Institutions																Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
State requirement.	X	X	X	X	X	...	...	...	X	...	...	...	...	X	...	X	8
Facilitates the tracing of expenditures	...	X	...	...	...	...	...	...	...	...	...	...	...	X	...	...	2
Provides an itemized record of the transaction	X	...	X	...	...	X	X	X	...	X	X	X	...	X	...	...	9
Provides an excellent check on expenditures.	...	...	...	...	...	X	...	...	...	...	X	...	...	...	...	...	2
Convenient to file	...	...	X	...	...	...	X	...	...	...	X	...	...	...	...	...	3
Serves as a receipt for bills paid	...	...	...	...	...	...	...	...	...	X	...	...	...	...	...	...	1

NAME OF COLLEGE
BUSINESS OFFICE
NAME OF CITY

VOUCHER

Department _____ Date _____
Must be given

Dr. to _____
Name of Firm

_____ Address of Firm

Terms _____ College Order No. _____
Unless otherwise specified
2% 10 days
Net 30 days will be applied Firm Order No. _____
plied

Number	Items	Price	Trade Disc.	Net Amount

Appropriation or
Account to be
Charged _____

Material
Rec'd O.K. _____
Head of Dept.

Correct
Dean or Admin. Officer _____

Approved
Finance Chairman
Committee

Approved _____
Financial Sec.

Fund _____

Expense Class _____

Paid by Warrant No. _____

Posted Warrant Register	Inven- tory Records	Order	Dis- burse- ment Ledger
-------------------------------	---------------------------	-------	----------------------------------

Fig. 4.- Voucher form used in institution Number 12.

the tracing of expenditures. Second, it provides an itemized record of the financial transaction. Third, it is convenient to file. One institution states that the voucher serves as a receipt for bills paid. The form presented in Figure 4 will not serve as a receipt for payments made unless space is provided for the signature of the vendor. It would be necessary to return the voucher with the check to the vendor who must bear the expense in both time and money of signing the voucher and returning it to the institution. The burden placed upon the vendor, however, may be avoided by using a combination voucher and check. The cancelled check and voucher jacket, containing an itemized statement of the transactions, constitutes a receipt for the payment of the bill when signed by the vendor.

The chief facts regarding the use of the voucher are presented in Table XV. The data show that of the thirteen institutions using the voucher seven employ only one form, while four institutions employ two different forms, and two use three forms. The use of a multiple number of forms in operating the voucher system is a device employed to assist the accountant in making charges to the proper fund. Some institutions have both local and state funds, and the specially colored voucher indicates the fund to be charged with the expenditure. The use of a different colored voucher for each fund is a valid procedure. The same results may be obtained, however, by the use of a general voucher and code numbers. The office forms will be simplified when only one is employed, and for this reason the use of a general voucher form is recommended.

A study of Table XV reveals the fact that in most institutions the voucher must be approved by the president. There are at least two important reasons which justify this procedure. First, state authorities hold the president responsible for the administration of institutional funds. His signature on a voucher, therefore, signifies his approval of the expenditure. Second, a careful examination of all vouchers passed for payment will assist in keeping the president informed regarding the business transactions of the institution. Reeves and his associates¹ make the following comment concerning this question:

"While there may not be more than one check in a hundred that the president will need to question with regard to either the amount or the purpose of the expenditure, the whole process of countersigning is an important method of safeguarding the funds of the college and for keeping the chief executive officer in close touch with its business affairs."

¹Reeves, et al, op. cit., p. 442.

TABLE XV
ANALYSIS OF THE OPERATION OF THE VOUCHER SYSTEM IN SIXTEEN TEACHERS COLLEGES

Institutions	Number of Voucher Forms in Use	President Approves Each Voucher	Business Manager Approves Each Voucher	Separate Entry Made in Voucher Register for Each Voucher Drawn	One Entry Made for a Group of Vouchers	Totals of Vouchers Distri- buted to Accounts in Vouch- er Regis- ter	Control Accounts Posted Monthly	Other Accounts Posted Daily or as soon as Vouch- ers Are Paid
1	2	X		X		X	X	
2	2			X		X	X	
3	2			X		X	X	
4							X	
5	1							
6	1							
7	1							
8	1							
9	1							
10	3							
11	3							
12	1							
13								
14	1							
15								
16	1							
Total . . .		9	4	11	1	12	7	5

Very few of the colleges studied issue checks that are to be paid from state funds, but they do prepare the vouchers from which the checks are issued. An examination of the voucher, therefore, should serve the same purpose as an examination of checks in keeping the president informed regarding the expenditures of the institution. It would not be necessary for the president to countersign the voucher in institutions which issue both the voucher and the check. He should sign the check, however.

A further examination of Table XV shows that an entry is made in the voucher register for each voucher issued in eleven institutions, and in one college a single entry may be made to care for a group of vouchers. When the total of a group of vouchers is entered as a credit in the voucher register and distributed as a debit entry to the proper appropriation or revolving fund accounts, there is greater difficulty in identifying the individual expenditures. A single entry, on the other hand, provides a complete history of each transaction, and that is one of the main purposes of accounting. A single entry for each voucher drawn, therefore, is recommended as the most satisfactory procedure.

The entries in Table XII showed that the voucher is not prepared until the invoice is passed for payment. Common sense dictates, however, that a budget commitment is made when the purchase order is prepared. In this connection Morey¹ says that,

"Since appropriations set limitations on the amounts which may be expended for various purposes, account must be taken of all obligations which will be payable from appropriations. These obligations in the form of orders, contracts, and other items, constitute 'encumbrances' against appropriations."

A president who receives a monthly report which shows only budget appropriations and expenditures does not have, in most cases, a true statement of the actual financial conditions of the various accounts. The difference between the appropriation and expenditures in each account is often heavily obligated. Unless an exact record of all encumbrances is readily available, deficits are apt to occur. Concerning this question Morey² states that,

"When copies of orders are received from the purchase office entries are made in the various appropriation sheets in the column 'Orders Placed.' The total of unpaid orders

¹Morey, op. cit., p. 32.

²Ibid., pp. 110-113.

is extended after each entry, or each day's entries. The estimated cost of each order is deducted from the free balance.

When vouchers are received on orders previously entered as encumbrances, the amounts of original encumbrances are first entered in the 'Orders Paid' column and the new total of the unpaid orders is extended. The amount of the vouchers is then entered under 'Disbursements.'

No institution in this group of sixteen teachers colleges operates a book of accounting which provides a record similar to the one described by Morey. Subsidiary ledger accounts are operated for budget items but they do not show encumbrances. This group of colleges, however, maintains a record of encumbrances, but the information is not recorded in the budget ledger. Table XVI shows that thirteen institutions maintain files of purchase orders. The other three institutions do not prepare the purchase order. They do maintain a file of requisitions, however. As a group, these colleges keep two files of purchase orders, namely, an unpaid and a paid file. The unpaid orders are filed by departments. When an invoice is passed for payment, the corresponding purchase order is transferred from the unpaid to the paid file. The purchase order is filed by number in the latter case. This unpaid file of purchase orders provides a record of the outstanding obligations of each department. This record combined with a budget ledger showing all departmental expenditures will reveal the true condition of each budget appropriation. Although the forms employed in recording these facts are not comparable to the ledger form suggested in the foregoing quotation from Morey, the information which can be derived from the records maintained by this group of colleges and that suggested by Morey is exactly the same. A decision concerning which record should be employed should be based upon the facility with which the two records may be operated. A further study of the foregoing quotation by Morey shows that six entries must be made for each order placed, namely, entries for orders placed, orders paid, an adjustment entry, and total unpaid orders, on the encumbrance side of the ledger; and the amount of the voucher and the free balance, on the disbursement side. In the record maintained by this group of teachers colleges there is really only one entry made for each order placed. This entry is a record of the actual disbursement. In compiling monthly reports from the records maintained by this group of colleges, totals of both expenditures and purchase orders unpaid must be calculated in order to show the free balance of the budget appropriation. The monthly report may be prepared

TABLE XVI

BUSINESS OFFICES WHICH MAINTAIN FILES OF PURCHASE ORDERS
IN SIXTEEN TEACHERS COLLEGES

Institution	Purchase Order Files Maintained
1.	X
2.	X
3.	X
4.	
5.	X
6.	X
7.	X
8.	X
9.	
10.	X
11.	X
12.	X
13.	X
14.	X
15.	
16.	X
Total	13

from the budget ledger suggested by Morey by copying the last figures found in the appropriate columns since all totals are extended after each entry is made. It seems, however, that totals needed once each month can be obtained in much less time than is required for posting the budget ledger each time an order is placed. The evidence available does not justify a decision which would necessitate a complete change in practice in order to meet the requirements of theory.

Interdepartmental transfers.- A further examination of the data in Table XI shows that there is one other type of expenditure for which the accounting system must provide. Six institutions permit interdepartmental transfers of equipment and supplies. Some departments produce material that is sold to other departments, but as a rule there is no actual transfer of cash. Table XVII shows that there are two procedures followed in accounting for interdepartmental transfers in these six institutions. In three cases a voucher or transfer sheet is prepared and the regular entries are made just as is done in the case of any other expenditure. The other three institutions, however, simply make a credit and debit entry in the departmental accounts involved. In this case the department furnishing the material receives the credit, while the department receiving the material

TABLE XVII

METHODS OF ACCOUNTING FOR INTERDEPARTMENTAL TRANSFERS
IN SIX TEACHERS COLLEGES

Institution	Methods and Devices Employed	
	Credit and Debit Accounts	Voucher or Transfer Sheet
2.	X	
3.		X
10.	X	
12.		X
14.		X
16.	X	
Total	3	3

is debited with the cost. Since the credit and debit entry provides a complete record of the transaction, there is nothing to be gained by carrying a voucher entry through the entire accounting system. The simpler procedure is to be preferred as long as it provides all the necessary information. This entry should be made in the general journal and posted to the transfer credit and debit account in the general ledger at the end of the month.

Providing for the liquidation of outstanding obligations at the end of the fiscal year.- Table XVIII shows that fourteen of the sixteen colleges included in this study have outstanding obligations at the end of the fiscal year which must be liquidated. It is a difficult problem to get all requisitions filled and bills paid on or before the date which marks the closing of the fiscal year. Most institutions set a date some two or three months before the end of the year and notify faculty members that no requisition received after that date will be approved. This regulation cannot be adhered to strictly, however, for there are often emergencies for which the purchasing department must provide. Many times there are delays in filling requisitions over which the institution has very little control. As a result, when the business manager comes to consolidate the facts regarding the financial transactions of the fiscal year, he is apt to find a number of outstanding obligations. Table XIX indicates how this problem is solved in fifteen teachers colleges. One institution claims to pay all of its bills before the end of the fiscal year. The procedure followed by this one college is commendable, but it seems practically impossible in many institutions. This is

TABLE XVIII

PRACTICES OF FIFTEEN TEACHERS COLLEGES WITH REGARD TO
OUTSTANDING OBLIGATIONS AT THE END
OF THE FISCAL YEAR

Institution	Have Outstanding Obligations	Have No Outstanding Obligations
1.	X	
2.	X	
3.	X	
4.	X	
5.	X	
6.	X	
7.	X	
8.		
9.	X	
10.	X	
11.	X	
12.	X	
13.		X
14.	X	
15.	X	
16.	X	
Total	14	1

especially true in state institutions where the local authorities have no control over the red tape of state administrative machinery. The five institutions which charge the cost of outstanding obligations to the accounts of the next fiscal year are not adhering to their budgets. One of the principal reasons for operating under a budget plan is to see that each fiscal year carries its own burden. The practice followed by a majority of the institutions of setting up a reserve to satisfy outstanding obligations meets the demands of good business practice. A careful check should be made, therefore, of all outstanding orders, and a sufficient reserve set up from the appropriate accounts. This practice is also sanctioned by an authority in the field of business administration. Morey¹ states that,

"Sufficient balances of all appropriations and assignments are carried forward at the end of each year to cover the estimated cost of all orders and contracts outstanding at that time....A reserve is set up as at the last day of the year to cover all these balances."

In accounting for the reserve the appropriation accounts should

¹Ibid., p. 120.

TABLE XIX

METHODS EMPLOYED BY FIFTEEN TEACHERS COLLEGES IN
LIQUIDATING COSTS OR OUTSTANDING OBLIGATIONS
AT THE END OF THE FISCAL YEAR

Methods Employed	Number of Institutions
Charge obligations to accounts of next fiscal year.	5
Set up a reserve for the amount of obligations outstanding	9
Have no outstanding obligations at the end of fiscal year	1

be debited with the amount of the reserve, and a credit entry for the same amount should be made to the reserve set up to meet previous obligations. These entries are made on the old books. When the new accounts are opened the next year, this reserve must be accounted for under the proper appropriation account. This would necessitate a debit entry to the reserve accounts in the old books and a credit entry to a reserve account in the new books. The amount of the reserve should be based upon the estimated amount of the outstanding orders. In case the reserve is in excess of the actual cost of outstanding orders, a debit entry equal to the excess should be made in the new books to reserve accounts and a credit entry made for the same amount to the unap-propriated balance account in the new books.

Balancing and closing accounts.- A further investigation of the procedure followed in accounting for expenditures in sixteen teachers colleges reveals that the problem of balancing and closing accounts is given a great deal of consideration by the co-operating colleges. The entries in Table XX show that fifteen of the colleges balance their accounts once each month. Accounts are balanced to see that no discrepancy has occurred in handling institutional funds or in recording financial transactions. Arnett¹ states that, "The ledgers should be balanced regularly, at least once a month, and the accuracy of every account proved." Both practice and theory indicate that the procedure followed in regard to balancing accounts in this group of colleges is very satisfactory.

The data in Table XX also show that thirteen of the fifteen institutions represented close their books of accounting

¹Arnett, op. cit., p. 92.

TABLE XX

PRACTICES IN BALANCING AND CLOSING ACCOUNTS IN FIFTEEN TEACHERS COLLEGES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	Date of Closing Books Each Year	Interval at Which Ac- counts Are Balanced	Accounts That Are Never Closed	Accounts That Are Closed into Other Accounts	Accounts into Which Other Accounts Are Closed
1. .	Aug. 31	Monthly	Capital accounts	None	
2. .	Sept. 30	Monthly	None	None	Same accounts reopened
3. .	Aug. 31	Monthly	Cash account	Income accounts	Uninvested account
			Bank account	Expenditure accounts	
			Capital account		
			Alumni account		
4. .	June 30	Monthly	Student accounts	None	Same accounts reopened
			Revolving fund		
5. .	June 30*	Monthly	None	None	Same accounts reopened
6. .	June 30*	Monthly	None	None	Same accounts reopened
7. .	Dec. 31	Monthly	None	None	Same accounts reopened
8. .					
9. .	July 1	Monthly	None	None	Same accounts reopened
10. .	June 30	Monthly	Locker fund	None	Same accounts reopened
11. .	June 30	Monthly	Dormitory deposits	Contingent account	Maintenance account
		Annually	None		
12. .	June 30	Monthly	None	None	Same accounts reopened
13. .	Jan. 1	Monthly	None	Income accounts	
			All local funds	Expenditure accounts	
14. .	June 30	Monthly	Capital accounts	None	Same accounts reopened
15. .	June 30	Monthly	Accounts receivable	None	Same accounts reopened
16. .	June 30	Quarterly	Vouchers payable	Income accounts	Deficit and gain
			Student loan accounts	Expenditure accounts	account
			Capital accounts		
			Campus accounts		

*Books closed every two years.

once each year. The books in the other two institutions are closed at two-year intervals. A brief consideration of financial administration shows that the practice of closing accounts once each year is sound. Although state appropriating agencies are interested in knowing at the end of each biennium whether or not state funds have been used for the purpose for which they were appropriated, the college budget is made to cover only a one-year period. The local administrator, therefore, needs information at the close of each fiscal year regarding the success of budget administration. Such a check should furnish much of the information upon which the financial plan for the coming year is based. Closing the books of accounting at the end of each biennium for the purpose of checking financial results may furnish the information needed by state officials, but it does not meet the requirements of college administrators. In commenting on this question, Arnett¹ says that,

"At the end of the fiscal year the books should be closed in order that the financial results of the year's operation may be learned. The ledger accounts with 'Funds' and with 'Plant and Equipment,' representing as they do assets and liabilities of a fixed nature, remain open since they are of a continuous character and do not concern operation of the year."

The evidence shows that eight institutions do not operate any accounts that are not closed at the end of the fiscal year. All institutions possess plant assets and should, therefore, operate certain capital accounts. According to the foregoing quotation from Arnett, capital accounts are of a continuous nature and should not be closed. The data in Table XX show that eight institutions do not operate any accounts which are not closed. This means that these institutions do not maintain capital accounts, or that they do not recognize the fact that capital accounts are of a continuous nature and should not be closed. Some institutions also follow the practice of leaving some accounts open that should be closed. Such accounts as vouchers payable, cash accounts, revolving-fund accounts, and other accounts involving local funds furnish good examples. It is necessary to close cash accounts in order to determine the amount available for future appropriations. If this is not done a definite financial plan cannot be developed, and a well planned program is the first step in scientific financial administration.

A further study of Table XX shows that there is a tendency in teachers colleges to carry accounts over from year to year.

¹Ibid., pp. 92-3.

If there is a balance in any account it is simply transferred the succeeding year to the same account re-opened. An appropriation allocated to a particular item in the working budget attempts to satisfy the needs of the account for a period of one year. In fact, it is a difficult matter to develop a plan for appropriations that is suitable for that length of time. All balances should go into the general fund at the end of the fiscal year so they may be appropriated to the purpose for which they are needed most. Each account, therefore, in the current-fund division should be closed into surplus and deficit accounts, and, if there is a deficit, provision should be made to care for the same without charging it to the budget of the next year.

Property Accounting

Property classifications.- A careful study was made of property accounts, budgets, inventories, and reports for the purpose of determining property classifications. The data collected are presented in Table XXI. These data show that there are four main classifications, namely, land, buildings, furniture and equipment, and other property improvements. The first three of these classifications are employed by twelve of the sixteen institutions. Under "land" the colleges include such items as tracts of land used for farms, recreation, and the campus proper. Under "buildings" they list separately all types of buildings owned by the college. The sub-headings under "furniture and equipment" include various kinds of office equipment, instructional equipment, recreational equipment, and many kinds of machinery and tools used by the service force of the college. Under "other property improvements" the colleges list such items as fencing, roadways, walks, reservoirs, and monuments. An examination of each college campus shows that practically all institutions of this group have invested a considerable amount of money in such improvements as are represented by the latter account. Only a few institutions have recorded detailed facts concerning such property, however. The data indicate that the property classifications in teachers colleges are quite uniform and that they are also very simple in nature. It is possible, therefore, to develop a uniform set of property accounts for teachers colleges.

Capital accounts.- Two chief means were utilized in securing data regarding the capital accounts maintained by this group of colleges, namely, personal interviews with the business managers, and an examination of the books of accounting. The information secured is presented in Table XXII. An examination of the entries in the table shows that nine institutions maintain accounts for

TABLE XXI

PROPERTY CLASSIFICATIONS EMPLOYED IN SIXTEEN TEACHERS COLLEGES

Classifications	Number of Institutions
Land.	12
Buildings	12
Furniture and equipment	12
Other property improvements	4

appropriations which are made for capital purposes. Ten institutions also maintain a separate account for land, buildings, and equipment. A careful examination of the accounts shows that many of these records can hardly be called accounts. In many cases either the original contracts, the vouchers showing payment, or the inventories are the only records maintained. In only one institution is there a separate division or a separate ledger devoted to capital accounts. The following statement indicates that at least one college president recognizes that the records concerning the property owned by the college are very incomplete. President Butcher¹ states in his biennial report for the two years ending June 30, 1930 that,

"To the man who has not worked upon a college campus the matter of a record of dates of construction, dates of occupancy, cost, and other interesting details of a campus building, seem simple enough. It really is not. The administration can appoint some one to keep a record of those events which properly belong in the history of the institution. Unless the person so appointed has a genuine interest in the task he will neglect it....The events themselves are for the most part unimportant at the time they occur. They are common knowledge and no one is particularly interested in them."

In addition to the type of historical information referred to in the foregoing quotation there is a legal description of certain property belonging to state teachers colleges. The following example was taken from the property accounts of institution Number 12.

"Legal description of the eighty acres which constitute the main campus of the _____ State Teachers College, (name

¹Thomas W. Butcher, Thirty-Third Biennial Report of the Kansas State Teachers College of Emporia, pp. 34-5. Topeka: Kansas State Printing Plant, 1930.

TABLE XXII

CAPITAL ACCOUNTS MAINTAINED BY SIXTEEN TEACHERS COLLEGES

Accounts Maintained	Number of Institutions
Appropriations.	9
Land.	10
Buildings	10
Equipment	10

of city), (state).

The south one-half ($\frac{1}{2}$) of the southeast quarter ($\frac{1}{4}$) of section fourteen (14), township eighty-nine (89) north, range fourteen (14) west of the fifth principal meridian."

It is important to note that only one institution was found to carry a descriptive account of this type. Such a record is very important, however, since it assists in identifying all land owned by the college. It also assists materially in tracing all legal procedures relating to deeds and abstracts of such property, and it furnishes a historical record that will enable any one in the future to gather facts about the property of the college in which he may be interested. If the co-operating colleges continue to follow their present practice concerning property records many of the important facts will eventually be lost sight of.

In addition to appropriations, property is often acquired through gifts. Money is donated and property purchased, or in some cases land is donated to the college. Institution Number 14 reports donations totaling more than \$135,000 which have been used to secure certain college buildings. The same institution also reports a gift of twenty acres of land which was the original site of the college.

Requisitions and inventories constitute the chief records of property in this institution. These records show quantity, name, condition, unit value, and extensions of property. Such records have reference chiefly to equipment which is purchased from year to year. No division of the general ledger is devoted to accounting for permanent property, and the many important details connected with appropriations, gifts, and building construction which show the conditions and purposes for which each is made, are very inadequate. In general, this condition is typical of the group of colleges included in this study. There is very little real accounting for property done. In probably all of these institutions the various items of property which

they own are listed in some form. Very little information is provided by such records, however, since they are neither set up nor organized so as to make them available for immediate use.

Good judgment dictates that the property accounts suitable for any college should provide a complete record of the individual items included in each class of property owned by the institution. The general classifications of property owned by the co-operating colleges is exhibited in Table XXI. An account should be provided for each, and in general these accounts should be similar to those listed in Table XXII. An examination of the request for appropriations presented to state legislatures by the sixteen colleges shows that both current and building funds are included in the tentative budget. Capital fund estimates are prepared, therefore, at the time or before the tentative budget is formulated. In order to account for such estimates an account for estimated income from appropriations (plant fund) should be set up. The amount of the estimate should be entered as a debit to this account. To offset this account an appropriation account with plant funds should be maintained. The amount of the estimate should be entered as a credit to this account. As the income from the appropriation for capital purposes is realized the amount should be entered as a credit to the estimated income from appropriations (plant fund) account and as a debit to the appropriation (plant fund) account.

The general ledger control accounts exhibited in chapter 11 show that each fund group should be assigned a separate division in the general ledger. This book should carry a division, therefore, for plant funds. The actual cost of permanent property should be entered as a debit to the property account when it is acquired, and an account with funds invested in fixed assets should be credited with a like amount. All the credits entered to the funds invested in the fixed assets account should equal the total debit entries of all the property accounts.

Inventories.- An examination of the data in Table XXIII shows that nine of the institutions in this group of colleges make regular inventories of property. Just a little more than 56 per cent of these colleges follow this practice. Common sense dictates that college property should be carefully cared for. It is costly and it is also one of the essentials of college instruction and administration. Poor equipment is likely to be a hindrance to good instruction. Unless it is definitely known what property the college possesses, where it is located, and who is responsible for it, there is no possible means of supervising and providing the care that equipment should receive. Lack of information concerning quantity and location eliminates the possibility

TABLE XXIII

NUMBER OF INSTITUTIONS WHICH MAKE A REGULAR INVENTORY OF
PROPERTY IN SIXTEEN TEACHERS COLLEGES

Institutions	Make Regular Inventory of Property
1.	
2.	
3.	
4.	
5.	X
6.	X
7.	X
8.	X
9.	
10.	X
11.	X
12.	X
13.	
14.	X
15.	
16.	X

of meeting needs and possible property transfers, thereby reducing the efficiency of property management and use. The lack of an accurate knowledge of all property owned by the institution may result in an over-supply of certain types of equipment. If college property is to be adequately supervised, a well prepared inventory is of great importance. College authorities should recognize the fact, however, that the property accounting necessary for the preparation of an adequate inventory is costly. Nevertheless, it seems very desirable for the colleges that can provide the necessary funds to maintain an accurate and up-to-date record of all permanent property.

A study of the inventories of nine institutions reveals the fact that certain information is pertinent to a good inventory. The data collected in this connection are presented in Table XXIV. The important fact noted in this table is the almost complete lack of information concerning the condition of the items listed in the inventory. A definite knowledge of the condition of the equipment and other college property should be the basis of all repair programs, disposals, and replacements. A repair program should be a continuous affair, but it cannot be properly conducted unless college authorities know where repairs and replacements are needed. Lack of the foregoing information constitutes a serious defect in inventories.

TABLE XXIV
INFORMATION RECORDED IN THE INVENTORIES OF
NINE TEACHERS COLLEGES

Facts Recorded	Number of Institutions
Date of inventory	9
Description of item	9
Condition of item	2
Quantity.	5
Unit price.	5
Extension	5

Departmental accounting for property.- The data in Table XXV have been compiled for the purpose of showing the relation of the department to property accounting. The data were obtained by an analysis of inventories, reports, and the few property accounts found in the various business offices. The evidence shows clearly that teachers colleges give the department very little recognition in connection with property accounting. Very few department heads maintain a perpetual inventory of property under their supervision or make annual reports concerning its condition. It is also important to note that the business office in practically all institutions fails to maintain departmental property accounts. This office has no record of the location of movable property under the present system of accounting in the great majority of the institutions. Neither is there a record of the number of property items which have been distributed to the various departments. These facts are essential in adequate property administration. At present the department head prepares his inventory by making an actual count of the items assigned to the department. Much time could be saved if a perpetual record of property were maintained in the department. The inventory could then be made by merely copying the record from the cards. Institution Number 8 meets this general deficiency in property accounting by maintaining a fixed property card file. A duplicate of this card is presented in Figure 5. One card is maintained for each property item. An examination of Figure 5 shows that this card possesses both desirable and undesirable features. The fact that the card provides space for recording data regarding the acquisition, the disposition, and the balance of property on hand constitutes a very desirable feature of the record. It is the type of information needed in property supervision. A few

TABLE XXV

RELATION OF COLLEGE DEPARTMENTS TO PROPERTY ACCOUNTING
IN SIXTEEN TEACHERS COLLEGES

Relation of Department to Property Accounting	Number of Institutions
Department heads keep a perpetual inventory of property.	4
Departments make an annual report on property . .	3
Business office keeps a property account with each department	2
Department has no part in property accounting . .	7

important facts, however, are not shown on the card. It is noted that there is no information regarding the firm from which the article was purchased. If this fact is not given, much time may be consumed in searching catalogues for a desirable company with which to place an order. A property card should be kept strictly up to date; otherwise, it will not show the exact status of the supplies on hand. A property card file in the business office which will provide the information suggested here, with a duplicate in each department for departmental equipment, will greatly facilitate property management. Since the colleges as a group do not provide the type of record outlined, it is evident that there is very little property supervision by administrators in these institutions. In the co-operating colleges the department is the unit of internal administration. Common sense dictates that it would be valuable to utilize this same administrative unit in a program of property accounting.

Summary

The accounting system.- A study of the books of accounting operated by teachers colleges reveals the fact that many institutions do not maintain a general ledger and a greater number do not operate a book that can be classified as a budget ledger. Only four of the institutions which operate a budget ledger maintain a general ledger. The evidence also shows that many institutions which maintain subsidiary ledgers for auxiliary activities and agency funds do not maintain a general ledger. The voucher register, cash book, and a system of duplicate receipts are employed in practically all colleges. The general journal and the pay-roll register are not operated by half of the institutions and very few operate a check register. An analysis of voucher register forms employed by teachers colleges shows that

this book contains valuable information. The distribution of expenditures aids in posting other accounts, and the record of unpaid vouchers provides an encumbrance record that is valuable. The data also show that the cash-disbursement book contains a record which duplicates that found in the voucher register. The cash-disbursement book should be eliminated, therefore, where the voucher register is used. The general journal is not used at present so as to make it serve its most important purposes.

There is no general tendency among the colleges regarding the type, organization, or number of general ledger accounts that should be operated. A critical analysis of the accounts maintained, however, shows that there are four groups of funds that must be accounted for. They are current funds, plant funds, loan funds, and agency funds. In addition to the accounts for these funds the data show that the general ledger must carry certain depository and budget accounts.

There is wide variation in the organization, classification, and titles used in budget accounts. In fact, no two institutions employ exactly the same accounts, and in many cases expenditures are recorded under account groups that are entirely out of harmony with any systematic grouping of accounts.

Accounting for income.- Teachers colleges must account for two types of income, namely, income from state appropriations and income from local sources. In the majority of institutions state appropriations are not turned over to the college except in monthly installments. The money is released on the basis of vouchers issued. The fact that the system of accounting for local income does not provide a sales ticket and a definite procedure for reporting on sales made constitutes a serious defect in present practice.

Almost 50 per cent of the institutions do not operate a detailed account for each budget appropriation. Failure to maintain detailed records reduces the value of the accounts in connection with budget control. The income from auxiliary activities, however, is usually given a set of accounts separate from other sources of income. In a few cases a separate account for each activity is not operated.

Accounting for expenditures.- Expenditures may be readily classified on the basis of origin and on the basis of the method of liquidation. The types of expenditures are very uniform in teachers colleges. An analysis of the procedure followed in administering expenditures which originate through requisitions showed that present practices are very satisfactory except in one important respect. In the majority of institutions the president must approve the requisition, but there is no evidence to justify

this procedure. It appears that the signature of the business manager should be sufficient. The procedure followed in administering expenditures which originate through pay-rolls and expense vouchers seems to satisfy all requirements.

Judging from present practice and from actual utility the voucher and the voucher register are the most important form and book of the original entry type operated by teachers colleges. In operating the voucher register business managers in general have failed to recognize one important merit of the voucher system, namely, the fact that it provides a record of encumbrances which have been vouchered for the various budget accounts. The president is responsible for counter-signing vouchers in the majority of institutions, which is a valid procedure.

The method followed in teachers colleges of providing a record of all budget commitments differs from the method recommended by some authorities. No record of encumbrances is maintained in a book of accounting, but the business office keeps a departmental file of requisitions and orders from which budget commitments may be obtained.

In accounting for interdepartmental transfers some institutions prepare a transfer voucher. This voucher is then run through all records just the same as any other voucher. Since there is actually no change or transfer of cash, a transfer entry in the general journal provides a much simpler procedure. The evidence indicates, therefore, that the practice of preparing a transfer voucher should be discontinued.

The majority of institutions have outstanding obligations at the end of the fiscal year. These obligations are met by setting up a reserve from the appropriate budget account in most cases. Several institutions, however, charge outstanding obligations to the budget of the next fiscal year. This is a very undesirable practice. On the other hand, the practice of setting up an adequate reserve to meet outstanding obligations is a very desirable procedure.

The practice followed in balancing accounts once each month and closing certain accounts at the end of the fiscal year is to be commended. The evidence shows, however, that institutions operate certain capital accounts that should not be closed since they are of a continuous nature. There are other accounts, however, which some institutions do not close that are not of a continuous nature.

Property accounting.- In general, property owned by teachers colleges can be classified under four main headings, namely, land, buildings, furniture and equipment, and other property improvements. The uniformity with which property can be classified

is a decided aid in setting up a chart of uniform property accounts. Property accounting in teachers colleges is very inadequately done. A majority of the colleges visited keep nothing but memorandum records.

If property is to be well administered it is necessary to make regular inventories of all items owned. Many institutions do not follow such a procedure. The inventories which are made show certain serious defects when the facts contained are critically analyzed. Very few inventories show the condition of the items listed. This information should certainly be included for items of furniture, equipment, and buildings. The location of the items is another important fact that is not shown. Much time and effort as well as money may be saved by knowing the exact location of each property item. Property accounting and administration can be greatly improved by maintaining in the business office a fixed property card file. There should be a card for each property item. A duplicate of each card should be provided for the department in which the property is located.

CHAPTER III

BUDGETARY PROCEDURE

The purpose of this chapter is to present a complete picture of budget making and administration in teachers colleges, and to point out the elements of strength and weakness in present practices. Suitable procedures based upon an interpretation of the data collected will be outlined when possible where defects exist.

The Tentative Budget

The budget calendar.- The data collected relative to the budget calendar are presented in Table XXVI. These data show clearly that there is very little agreement regarding the month in which work on the budget is begun. A similar situation exists with respect to the time set for the completion of the budget. The time allotted to budget preparation ranges from one to four months, the average being 2.85 months. There is no standard by which the exact time that should be devoted to budget making can be determined. In fact, the difference in time which is allotted to this purpose is due, in part at least, to the number and type of problems that must be solved. The problems arising will differ, no doubt, in the same institution from year to year. It is very likely, however, that budgets which are compiled in one month do not represent a well worked out plan.

The time that work is started on the budget has a definite relation to the beginning of the fiscal year. Sufficient time must be allowed for the preparation of the budget by college officials, for its adoption by the board of control, and for consideration of the budget by the legislature before appropriations are made. Each of the foregoing phases has many intervening steps. The time devoted to this enormous task in the co-operating colleges ranges from four to fifteen months, the average being 10.26 months. Concerning the date of beginning work on the budget, Reeves and Russell¹ contend that, "At least six months prior to the beginning of the fiscal year, departments should be asked to submit their budget needs." These authorities have reference to private institutions in which the adoption by the board of control constitutes final approval. In state teachers colleges the

¹Reeves and Russell, op. cit., p. 214.

TABLE XXVI

BUDGET CALENDAR IN SIXTEEN TEACHERS COLLEGES

Institution	Month in Which Work on Budget Is Begun	Time Set for Completion of Budget	Difference in Time (Months) between Columns 2 & 3	Beginning of Fiscal Year	Difference in Time (Months) between Columns 2 & 5
1	2	3	4	5	6
1	February	June	4	Sept. 1	7
2	May	July	2	Oct. 1	5
3	September	November	2	Sept. 1	12
4	August	October	2	July 1	11
5	June	September	3	July 1	13
6	June	October	4	July 1	13
7	July	Time varies		Jan. 1	6
8	June	December	6		
9	April	September	5	July 1	15
10	August	September	1	July 1	11
11	August	September	1	July 1	11
12	June	August	2	July 1	13
13	September	October	1	Jan. 1	4
14	July	October	3	July 1	12
15	October			July 1	9
16	July	November	4	July 1	12
Average.			2.85		10.26

adoption by the board of control is one of the preliminary steps in securing the approval of the budget. No definite statement can be made, however, concerning the period of time necessary between the initial step in budget preparation and the beginning of the fiscal year.

Chief phases of a tentative budget.- An examination was made of budgets and conferences were held with college presidents for the purpose of determining the chief parts of a financial budget. The study revealed that in thirteen institutions the budget consists of two parts, namely, items relating to income and items relating to expenditures. A budget is defined by Reeves and his associates¹ in the following terms: "A budget is a plan for income and expenditures covering a definite fiscal period." The few institutions which set up only a plan of expenditures are apt to come out at the end of the year with a deficit. They cannot be sure that there will be sufficient income to liquidate all budget commitments, and the financial program makes no attempt to limit expenditures to the income which the institution is fairly certain of receiving. A definite plan or estimate of income is needed, therefore, in order that income and expenditures may be carefully co-ordinated. A college should provide reasonable estimates of both income and expenditures; otherwise, it does not set up a real budget according to the foregoing definition.

Estimating income.- The data collected regarding the basis employed in estimating income from student fees are presented in Table XXVII. The data introduced show that the thirteen colleges base their estimates of income from student fees on past enrollment. Two institutions also take into consideration the rules and regulations inaugurated by state boards of education and the general economic conditions of the country. The use of past enrollment figures is the most conservative basis available in preparing estimates of income from student fees. Trends in enrollment may be calculated from such data. A careful study of trends and the contributing factors may prove to be very valuable. This is especially true if the trends show a decrease in enrollment from year to year. Arnett² states that,

"The estimates of student fees should be the amount received from students for the last completed year, unless the officers have reasons for supposing that the amount will be smaller. Only in most exceptional cases should the estimate be placed at a greater sum, and the reasons for doing so

¹Reeves, et al, op. cit., p. 461.

²Arnett, op. cit., p. 70.

TABLE XXVII

BASIS OF ESTIMATING INCOME FROM STUDENT FEES IN
THIRTEEN TEACHERS COLLEGES

Basis Employed	Number of Institutions
Past enrollment	13
Rules of state board of education	2
Economic conditions	2

must be most convincing."

Common sense dictates that it is also desirable to make a careful study of all factors which may influence enrollment. If there is a change, therefore, in either board rules, state laws, or economic conditions, its effect on college attendance should be noted and corresponding adjustments made in the estimates of income from student fees.

The consideration given to income derived from auxiliary activities in formulating the income budget is shown in Table XXVIII. The facts presented show that this type of income is given no consideration in formulating the income budget in a

TABLE XXVIII

CONSIDERATION GIVEN INCOME FROM AUXILIARY ACTIVITIES IN
FORMULATING THE INCOME BUDGET IN SIXTEEN
TEACHERS COLLEGES

Methods of Treatment	Number of Institutions
Receives no consideration	11
Is given the same consideration as any other income.	4
Is considered as a part of the revolving fund . . .	1

majority of institutions. This means that in these institutions the income from auxiliary enterprises is not budgeted. The enterprises are operated without a definite financial plan which is apt to result in a deficit that must be liquidated from current educational funds. If this is done the more productive phases of college work will suffer at least to the extent of the deficit. Since the income from auxiliary activities constitutes a revolving fund, the surplus is all that should ever be available for

strictly educational purposes. Before a surplus is assigned to the general educational fund a careful study should be made to make sure that the proper charges have been made for overhead, depreciation, and interest on investment. Although all income from supplementary business enterprises should be devoted to the needs of the activity, a careful estimate of such income should be made. An analysis of the income and expenditure records of each activity combined with the estimated enrollment figures should be used as a basis for estimating income from such enterprises.

The income from other local sources is a very small part of the total budget. A study of the records of the various sources should provide information upon which a conservative estimate of the income from each may be prepared.

The expenditure budget.- The entries in Table XXIX show that there is very little agreement concerning what constitutes the initial step in the preparation of the expenditure budget. Forwarding requests to department heads is considered the initial

TABLE XXIX

INITIAL STEPS IN THE PREPARATION OF THE EXPENDITURE BUDGET
IN SIXTEEN TEACHERS COLLEGES

Initial Steps	Number of Institutions
Department heads asked for estimates of needs . . .	8
Analysis of financial records of previous years . .	7
Conference of local financial committee	1

step in eight institutions. On the other hand, seven institutions report an analysis of financial records of previous years as the initial step.

A careful analysis of the earlier phases of budget-making should aid in determining what the first step should be. The completed budget, no doubt, should be in harmony with the general policies of the institution. Budget estimates, therefore, must be based upon previously approved policies. Policies cannot be worked out, however, without a knowledge of many facts concerning income and expenditures of at least the last few years. Each change in the educational program will probably necessitate some change in the financial plan. Before making a change in policy, therefore, the effect such a change will have upon the financial program should be determined in so far as possible. A careful analysis of the financial records will furnish much of the im-

portant data upon which institutional policies should be based. The foregoing discussion indicates that the process of assembling the facts which are to be used as a basis for outlining the financial and the educational program for the fiscal period should constitute the first step in budget making.

An inquiry was made concerning the officials who formulate the estimates of the various phases of expenditures. The data collected are presented in Table XXX. One important fact is disclosed by an analysis of the data in this table, namely,

TABLE XXX
BUDGET ESTIMATES FORMULATED BY VARIOUS OFFICIALS
IN SIXTEEN TEACHERS COLLEGES

Estimates Formulated by Various Officials	Number of Institutions
Estimates of departmental needs formulated by department heads.	16
Estimates of general library needs formulated by librarian	16
Estimates of a general nature formulated by the business manager and the president.	12
Estimates for service department formulated by the superintendent of buildings and grounds . . .	4

that the co-operating colleges in general utilize the organized units of administration in securing the financial estimates from which the budget is compiled. The entries in Table XXX also show that there are three general types of organization units. They are the instructional departments, the administrative department, and the service department. Estimates of a general nature are prepared by the administrative officials, but college authorities usually call upon their experts in the various fields of activity for budget estimates of a special nature. This procedure is satisfactory since it produces a budget that is compiled from estimates which have been prepared by officials who are in a position to judge most accurately the needs of the various administrative units.

The data presented in Table XXXI show the number of institutions which furnish blank forms and certain types of information to department heads to be used in formulating expenditure estimates. Analysis of the data introduced reveals two facts of vital importance. First, the business offices in the colleges studied, as a rule, do not furnish department heads with printed

TABLE XXXI

FORMS AND INFORMATION FURNISHED DEPARTMENT HEADS AS AN
AID IN FORMULATING BUDGET ESTIMATES IN
SIXTEEN TEACHERS COLLEGES

Forms and Information	Number of Institutions
No forms are furnished.	14
Printed or mimeographed forms are furnished	2
No budget information is furnished.	8
Departmental expenditures for last fiscal year are furnished	5
General institutional policies concerning budget allowance are furnished	7

forms. Second, in half of the institutions the department heads do not receive any information concerning past expenditures or future institutional policies. A printed form aids in securing uniformity in the types of information provided by departmental estimates. The information thus obtained is standardized, and if the forms are properly prepared they provide the exact data needed by the business manager and president in formulating the tentative budget. Furthermore, such budget information, in detailed form, can be easily filed for future reference if it is tabulated on uniform report blanks. In considering this general issue Lindsay and Holland¹ say that,

"Budget information, to be useful, must be recorded in detail, permanently and uniformly. These three conditions, of detail, permanence, and uniformity, cannot be fulfilled by either the letter or the conference method. They can be attained only by the use of standardized budget report forms." It is strongly recommended that all institutions employ a suitable printed budget estimate form in collecting departmental budget requests.

When the department heads are furnished no information upon which to base their budget requests, as is the case in half of the institutions, budget estimates are apt to be seriously out of line with institutional policies. It would be necessary, therefore, to make many revisions in budget estimates that could otherwise be avoided. A statement of a general policy for the institution should be sent out from the president's office with the budget requests. This should include both expansions or

¹Lindsay and Holland, op. cit., pp. 113-4.

improvements and retrenchments. Good judgment dictates that departmental estimates should be in accord with such policies. If, however, the changes in the general policies of the institution are not made known to the department heads it is not likely that there will be a satisfactory agreement between policies and estimates. A complete statement of departmental appropriations and expenditures is also very valuable in setting up estimates of biennial needs. The department head should be able to estimate quite accurately the degree to which past expenditures have satisfied departmental needs. Such information enables the department head to make adjustments in future estimates. Statements of past expenditures and of institutional policies should aid materially in making more accurate estimates of budget requests. The position taken by Reeves and Russell¹ concerning the information that should be furnished department heads when requests for budget estimates are made is stated very clearly in the following quotation:

"A statement should be supplied each department showing its expenditures for each item for the last previous year for which complete data are available. In a parallel column should be shown appropriations for the same item for the current fiscal year....At the time this blank is sent out, department heads should be advised as to the general administrative policy for the coming year with respect to expansions or retrenchments, both for the institution as a whole and for the particular department concerned."

An examination of the blanks used by institution Number 2, pages 4 and 5 of which are exhibited in Figures 5 and 6, reveals the advantages to be obtained by the use of a budget estimate form. Five pages of printed forms are employed in collecting the budget requests from each department in this institution. Page 1 is used to collect information regarding salaries and it is filled out by the president. This procedure seems satisfactory since the colleges are small, and since the presidents have the opportunity of being closely associated with each member of their respective faculties. Department heads should be consulted in this matter, however. Pages 2, 3, 4, and 5 go to the departments. Pages 2 and 3 are used to collect estimates of supplies needed by the department and pages 4 and 5 are used for equipment.

An explanatory letter is attached to the blank forms when they are sent to the department heads. A duplicate of this letter follows.

¹Reeves and Russell, op. cit., pp. 214-15.

NAME OF COLLEGE _____ BUDGET

DETAIL OF CAPITAL OUTLAY BUDGET

Department Art	Function Capital Outlay	Fiscal Year 1929-1930
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Below is an estimate of the capital outlay expenditures necessary for my department for the year beginning October 1, 192__ and ending September 31, 192__

No.	(1) Name of Account	(2) Report for Year 1927-1928	(3) Report for Year 1928-1929	(4) Budget for Year 1929-1930	(5) Budget for Year 1930-1931
D	Materials				
D1	Roadways and side-walks				
D2	Building materials				
D3	Sewers, water materials				
D4	Other materials				
E	Equipment				
E1	Office				
E2	Household				
E3	Medicinal and laboratory				
E5	Motorless vehicles				
E6	Motor vehicles				
E7	Educational and recreational	100.18	516.74	700.00	600.00
E8a	Other equipment (specified)				
E8b	Miscellaneous				
F	Lands and Structures				
F1	Lands and land improvement				
F2	Structures, including additions and betterments				
G	Fixed Charges				
G3	Rent				
G4	Insurance				
G5	Student organizations				
	Totals				

Fig. 6.- Capital outlay budget form used by institution Number 2.

NAME OF COLLEGE _____ BUDGET

EXPLANATORY DETAIL

Date 6-26-29

Department Art	Function Capital Outlay	Fiscal Year 1929-1930
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Use an explanatory detail sheet for each of the following:

- (1) Salary and wages--Explain requests for new positions and salary increases, for wages and special payment allotments.
- (2) Supplies and expenses--Enumerate cost and object of contemplated trips, list contemplated publications and more important items of supplies.
- (3) Equipment and other capital outlay--List all items of equipment costing over \$10.00. Indicate nature and estimated cost of all improvements to lands and buildings.

Below are the explanatory details of the budget requests for

Equipment for the Art Department

Head of Department

1929-30 - \$700.00

1930-31 - \$600.00

1929-30		1930-31
Case for slides- - -	\$50.00	Slides, reference material, tools, still life, pictures, statuary, magazines for reference, tapestries.
Lantern slides	200.00	
Duplicator	150.00	
Typewriter	90.00	
Reference material	35.00	
Tools	50.00	The lantern slides to be kept in the library and only those particularly pertaining to art to be filed in the Art office.
Etc.		
Etc.		
Etc.		
	700.00	We have found a decided need for magazines of art in our classrooms. The material contained therein should be mounted and filed in its appropriate place in our files for reference material. The magazines in the library are not available to us for this use.

Fig. 7.- Explanatory detail form for capital outlay used by institution Number 2.

Date _____

To Department Heads:

Attached you will find the blanks on which should be placed your estimates of the amounts needed for the operation of your department for the school year 1929-30 and the school year 1930-31. Estimates for 1929-30 should be accompanied by detailed explanations as asked for on the blue sheet. Estimates for 1930-31 will of necessity have to be more general. However, the more important items which will be needed in 1930-31 should be listed on the blue sheet.

In column No. 2 will be found the actual expenditures of your department for the school year 1927-28. In column No. 3 will be found the amounts approved by the Board for this school year. (In lead pencil you will find the amounts you have spent up to June 25.) In column No. 4 should be placed your requests for the school year 1929-30, and in column No. 5 should be placed your estimate for the school year 1930-31.

Will you please make out this report and return it to the office of the Secretary-Registrar by July 27.

It is often hard to distinguish between supplies and equipment. The following explanation may be of value to you:

Supplies are commodities of a nature which, after use, show a material change in, or an appreciable impairment of, their physical condition; i.e., foods, ink, paper, stencils, gasoline, coal, clothing, chemicals, chalk, erasers, cleaning materials, phonograph records, achievement tests, etc.

Equipment consists of machinery, tools, furniture, and other apparatus which may be used repeatedly without impairment of their physical condition and which have a calculable period of service; i.e., desks, science apparatus, maps, books, charts, musical instruments, typewriters, etc.

Estimates for supplies used in the instruction of students should be listed under 2C8 and estimates for equipment thus used should be listed under 8E7.

I shall be glad at any time to discuss with you any problem which arises in the preparation of this budget.

Secretary-Registrar

An examination of this letter shows that it provides a description of the information contained in the forms and an explanation of how the request should be prepared. No information, however, regarding either institutional or departmental policies is included. If a statement of policy were included the value of

the letter would be greatly enhanced.

Figure 6 shows the form upon which the business manager of institution Number 2 furnishes the department head information regarding departmental expenditures for equipment during the past year and the appropriation for the present year. Two columns are also provided for the biennial requests of the department. It is noted that the figures furnished the department head are in totals. Such figures do not show this official how the expenditures or appropriations are distributed. The department head needs this information in detailed form; otherwise, he cannot judge the adequacy of the detailed appropriations and be able to determine the amount that should be set for future appropriations. The form exhibited in Figure 6 does not satisfy these needs. The information it provides is far better than no information at all, however.

Page 5, which is exhibited in Figure 7, shows that the department head prepares the budget requests in great detail, giving an estimated expenditure for each item and the total of the entire request for each year of the biennium. The fact is also noted that this departmental estimate provides evidence to support the unusual requests made. An analysis of the entries in the blank shows that until the estimates presented in Figure 7 were prepared the department represented had never asked for magazines to be used as reference material. The last paragraph attempts to show why the request for magazines should be approved. A further examination of this departmental estimate shows that the requests for the second year of the biennium are made in detail but no estimates of detailed costs are given. Although the cost of equipment and supplies varies from year to year, the variation is not so great, as a rule, but that a properly prepared budget can provide for advances and decreases in prices. It appears, therefore, that a distribution of the total estimate for the second year of the biennium should be made similar to that of the first year. This will facilitate materially the adjustment of departmental requests when the budget is presented to administrative officers for final analysis. It should also be observed that the foregoing request fails to make a distinction concerning the importance or desirability of the various items included in the requests. In this connection Arnett¹ states that,

"If the budget plan is already in operation appropriations of the current year for each of the items should be given in one column, and requests for additional amounts for the coming year inserted in columns parallel thereto--those considered

¹Arnett, op. cit., p. 78.

important in one column and those deemed desirable in another." Such an arrangement of budget requests aids the administrative staff in making adjustments in the best interest of the departments concerned.

Table XXXII shows that after departmental estimates have been prepared the prevailing tendency is to have them submitted

TABLE XXXII
OFFICIALS RECEIVING DEPARTMENTAL ESTIMATES IN SIXTEEN
TEACHERS COLLEGES

Officials	Number of Institutions
President	10
Business manager.	5
Finance committee	1

to the president. Such a procedure is satisfactory since each budget request should be dealt with on its own merits. A careful study and adjustment of each request often requires decisions on problems which only the president has authority to settle. Submitting estimates to the president provides an opportunity for the department head to confer directly with the chief executive concerning budget adjustments. This relationship aids in producing an understanding of needs and policies on the part of both the president and the department heads.

The data in Table XXXIII have been compiled for the purpose of determining what officials actually summarize budget estimates which have been submitted by the various departments. The evidence shows that the business manager either summarizes or co-operates in making the summary of budget requests in fourteen of the sixteen institutions. This is a perfectly logical procedure since the business office should be better prepared than the president's office with both mechanical equipment and clerical assistance for making such compilations. Summarizing budget requests is also a routine duty which the president may advantageously delegate to some one who is prepared to perform it. The business manager should have the proper training for such a task.

In order to determine the types of information contained in a tentative budget and the form in which this information is presented, the budgets of fifteen institutions were carefully analyzed. The data obtained by this analysis are summarized in

TABLE XXXIII

OFFICIALS WHO SUMMARIZE BUDGET ESTIMATES IN SIXTEEN
TEACHERS COLLEGES

Officials	Number of Institutions
Business manager.	7
Business manager in co-operation with the president	7
President	2

Table XXXIV. They show that there is a tendency in teachers colleges to prepare the tentative budget in detailed form. This practice is satisfactory since it follows very closely the recommendations concerning the preparation of budget estimates by department heads. The completed budget must be submitted to a board of control for approval. A far more intelligent study of the budget by the board may be made if it has been prepared in detail and contains full explanations of all unusual features. It is noted that a majority of the institutions place in the budget the necessary supporting evidence. A detailed statement of budget needs also facilitates quantity buying since an accurate summary of similar needs may be secured from the departmental requests with very little trouble. This is especially true if

TABLE XXXIV

INFORMATION CONTAINED IN THE TENTATIVE BUDGETS OF
FIFTEEN TEACHERS COLLEGES

Date Included in Budgets	Number of Institutions
Detailed list of budget items with respect to organization units.	12
Summary list of budget items.	6
Expenditures for the previous year and estimated expenditures for present year	12
Expenditures for previous biennium and estimated expenditures for present biennium	2
Appropriations for present biennium	7
Detailed requests for succeeding biennium	12
Detailed requests for succeeding year	1
Summary requests for succeeding biennium.	3
Statements of needs and supporting evidence	9

the college maintains a general supply department.

A further study of the data introduced in Table XXXIV reveals the fact that many comparative figures are included in the tentative budget. A detailed distribution of expenditures for the previous year constitutes the most important type of comparative data. In some cases a similar type of data is presented for the previous biennium instead of for the previous year. Such figures as the foregoing make possible a comparison of the expenditures during the past year or biennium with the estimated expenditures for the succeeding year or biennium. A study of this nature provides a vivid picture of financial policies. The board, therefore, is in possession of complete information concerning the program outlined by the president and his assistants. In case comparative figures were not presented the board could not determine wherein improvements or retrenchments were advocated. The budget under such conditions would not throw any light upon institutional policies. The practice of preparing comparative data in the form of previous expenditures will necessitate a more careful study of budget requests on the part of local administrators, which practice will produce a better budget.

Common sense dictates that after the departmental requests have been compiled in the form of a tentative budget, revisions are often necessary. The data collected relative to the authority and the procedure for making the necessary revisions are presented in Table XXXV. The two outstanding facts shown by the entries in the table are: (1) the president has final authority within the institution for the approval or revision of budget estimates, and (2) the department heads are consulted concerning the revision of budget requests.

TABLE XXXV

PROCEDURE FOR SECURING APPROVAL OR REVISION OF BUDGET
REQUESTS IN SIXTEEN TEACHERS COLLEGES

Procedure for Approval or Revision of Budget Requests	Number of Institutions
President has final authority for the approval or revision of budget requests.	15
Business manager has final authority for the approval or revision of budget requests	1
Department heads are consulted regarding the revision of budget requests	14
Department heads are not consulted regarding the revision of budget requests	2

The board of control holds the president responsible for the proper administration of educational affairs in all the co-operating colleges, and he is placed in charge of financial affairs in a majority of institutions. Institutional funds are provided for the purpose of promoting education. The president, therefore, should have the authority to determine what requests should go in the budget. The practice of conferring with department heads concerning budget adjustments gives these officials an opportunity to show what changes in budget requests will best meet the needs of their departments. Such a procedure results in a budget which is as nearly satisfactory to all concerned as it is possible to make with the available income.

Adoption of the budget.- After the final approval of the tentative budget by the president, it is passed to the board of control for adoption in thirteen of the sixteen institutions, while in three the budget goes directly to the state finance officer. Table XXXVI shows that in the thirteen cases represented the president is permitted to be present when the board meets for the purpose of considering the budget. The president of institution Number 5 mentioned the fact, however, that the board could go into an executive session at any time it desired, and at such a session the president would be excluded. The business

TABLE XXXVI

INDIVIDUALS ADMITTED TO BOARD MEETINGS WHEN BUDGET IS UNDER CONSIDERATION IN THIRTEEN TEACHERS COLLEGES

College Officials and Other Persons	Number of Institutions
President of the institution.	13
Business manager of the institution	4
Any interested person	4

managers of four institutions have the right to attend the regular board meetings and in a like number of cases any interested person may attend. The evidence shows that the board recognizes the president as its advisor on financial matters. This official should be fully qualified to explain all problems arising from a study of the tentative budget by the board since he has examined each individual request from which the budget has been compiled. On the other hand, there seems to be no reason why the president should not call upon the business manager to assist in making such explanations as are asked for by the board. The tendency

now followed is satisfactory, however.

Data relating to the consideration and adoption of the budget are presented in Table XXXVII. These data show that in twelve of the thirteen institutions each member of the board has an opportunity to study the budget before it is given a formal consideration. Several of the presidents are sure, however, that

TABLE XXXVII

PROCEDURE FOLLOWED IN CONSIDERING AND ADOPTING THE BUDGET BY
THE BOARD OF CONTROL IN THIRTEEN TEACHERS COLLEGES

Procedure Followed	Number of Institutions
Each member of the board has had an opportunity to study the budget before it is given a formal consideration.	12
First formal consideration of the budget is given by the entire board	9
First formal consideration of the budget is given by a special committee of the board	4
If revisions are necessary they are made by the board	5
Budget is returned to the college officials for necessary revisions	8

certain members of their board do not take advantage of this opportunity. The approval of a college budget is a very important matter. First of all, it sanctions the proposed expenditure of a considerable sum of money. Second, it is an approval of the institutional policies which have been embodied in the budget by the officials of the institution. The budget should receive, therefore, careful study by the board of control before it is adopted, and especially is this true with regard to the policies involved. The data in Table XXXVII also show that the first formal consideration is given to the budget by the entire board in nine institutions and by a special committee of the board in four. The practice of presenting the budget to a special committee who presents its report to the board for adoption is a questionable procedure. Reeves and his associates¹ found in the study of thirty-five Methodist colleges that,

"The detailed budget, properly balanced between income and expenditures, as proposed by the administrative officers of the college, is usually presented to a committee of the

¹Reeves, et al, op. cit., p. 465.

board of trustees for their careful consideration and approval....After it has been approved by this committee....the budget is ready for presentation to the board of trustees at their next meeting."

In discussing the disadvantages of the committee system, Reeves and his associates¹ also say that,

"The board as a whole tends more or less to become a rubber stamp for committee actions....although these committees may technically report to the entire board at an annual or semi-annual meeting, only in very rare instances are their actions even questioned and almost never are they reversed."

The very vital objection that has been stated is just as applicable to the few college boards included in this study which function through a committee system as it is to the colleges included in Reeves' study. Not a single case was found where a committee report had been rejected. The president of institution Number 5 stated that the board reserved the right to reject the committee report, but he cited no instance in which it had been done. Reeves found the median number serving on a finance committee to be seven in the thirty-five colleges which he studied. The number of board members in the teachers colleges ranges from five to eleven, the median being seven. The entire membership of the college boards included in the present study is no larger than the committees reported by Reeves. The evidence available indicates that the nine institutions which present the budget to the entire board instead of a special committee are following a satisfactory procedure.

In case a revision of the budget is necessary it is made by the board in five institutions; in eight institutions, the budget is returned to the local college officials for revision. A decision as to needed adjustments in the budget should be based upon a study of the effect they will have upon the department concerned and the institution as a whole. In order to make the proper decision a broader knowledge of the immediate program and departmental needs is necessary than the board of control is in a position to have. It appears, therefore, that the budget, with the suggestions of the board, should be returned to the institutional officials for revision as is done in the majority of cases.

Consideration of the budget by the state legislature.-

The facts in Table XXXVIII show that the budget is delivered to some member of the state department after it is approved by the board of control. The purpose of this procedure is evident. The teachers college is one of the many institutions and departments

¹Ibid., p. 67.

TABLE XXXVIII

DISPOSAL OF THE BUDGET AFTER IT IS ADOPTED BY THE BOARD OF
CONTROL IN THIRTEEN TEACHERS COLLEGES

Officials to Whom the Budget Is Delivered	Number of Institutions
Officials of the state department	10
Legislative committee	2
Governor.	1

which derive their income chiefly from state appropriations. All budgets are collected by some state official and formulated into the state appropriation budget. For example, the state appropriation budget, of which the budget of institution Number 1 is a part, contains the appropriations for 116 different institutions and state departments. This budget contains 235 pages of statistical data. An examination of such a document shows that the individual budgets have been stripped of all explanatory statements and supporting evidence with the exception of the expenditure and the appropriation figures for the last biennium. A similar situation exists relative to the budgets submitted to legislative bodies in other states. The legislative committee, therefore, has very little information upon which to base a decision as to the advisability of allowing decreases, increases, and additions included in the various budgets.

A continuation of the procedure followed in presenting the budget to the state legislature is exhibited in Table XXXIX. The data show that in general the budget is presented to a committee of the legislature by the state finance officer, and that the legislative committee or its chairman presents the budget to the entire legislature. After the budget passes both houses of the legislature and receives the signature of the governor, it becomes a law.

The Operating Budget

Formulation of the operating budget.- As soon as state appropriations are made college authorities are confronted with the task of formulating a working budget. Table XL names the officials who are responsible for making the proper allocation of funds in the colleges studied. The data introduced reveal the important fact that the president assumes the responsibility of formulating the operating budget in each of the colleges. In half of the institutions, however, he utilizes the assistance of

TABLE XXXIX

PROCEDURES FOLLOWED IN PRESENTING THE BUDGET TO THE LEGISLATIVE COMMITTEE AND TO THE LEGISLATURE IN SIXTEEN TEACHERS COLLEGES

Procedure Followed	Number of Institutions
Budget is presented to legislative committee by state budget officer or committee	10
Budget is presented to legislative committee by president of the institution.	5
Budget is presented to legislative committee by governor.	1
Legislative committee presents budget to entire legislature	16

various institutional officers. The president should be well informed concerning the detailed needs of each department since he has had an ideal opportunity to inform himself concerning departmental needs during the construction of the tentative budget. If he is not well informed the task of collecting this information is not so great but that it can be accomplished readily. For the colleges included in the investigation, the practice reported in formulating the working budget is satisfactory.

TABLE XL

OFFICIALS WHO FORMULATE THE OPERATING BUDGET IN SIXTEEN TEACHERS COLLEGES

Officials	Number of Institutions
President	8
President and business manager.	5
President, dean, and department heads	2
President, business manager, and department heads	1

An examination of both tentative and operating budgets was made for the purpose of discovering the relation that exists between the items contained in each budget. In fourteen institutions the items included in the two budgets are the same, while in two cases the items included in the operating budget are given in more detail than those in the tentative budget. The evidence shows clearly that a strong effort is made to follow the financial

program set up in the tentative budget. To make a radical departure from this program without definite authority from state officials would violate the trust placed in local officials by state legislative bodies. Alterations in the financial program are often made necessary by changes in conditions which could not be predicted. It should be possible, under these circumstances, for the college officials to obtain the proper authority for such changes. The practice of following the items listed in the detailed tentative budget when making appropriations to the operating budget is very desirable.

After the allocations have been made in the operating budget, they must be approved by some official or officials before the budget can be entered. Table XLI shows that it is approved by some state official other than the college president in a majority of the institutions. Presenting the operating budget to some state board of officials for approval relieves the president of assuming full responsibility for the program of

TABLE XLI
AUTHORITY FOR APPROVING THE OPERATING BUDGET IN
SIXTEEN TEACHERS COLLEGES

Officials Who Approve Operating Budget	Number of Institutions
Board of control.	7
President of the institution.	6
State board of education.	3

spending the state's money. The approval of the operating budget seems to be more or less a matter of routine, however. Institution Number 9 reports the only case in which the board of control makes changes in the operating budget after the available revenue has been allocated by the president. In fact, most presidents report that the budget is approved without much study on the part of the board. This practice seems to be justified since the tentative budget has been previously approved by the board.

After the operating budget has been approved, the next step preparatory to its use is to notify the various department heads concerning the amount allocated to each. Only ten of the sixteen institutions make any attempt to notify department heads as to the provision made for their individual needs. This means that in six of the co-operating colleges the departments have no information regarding the amount of money that may be devoted to

supplies and equipment. Very little planning can be done under these conditions and such a procedure eliminates entirely the assistance of the department in controlling expenditures. The department head never knows whether everything he wants and needs can be bought, or whether he must select the most important items for purchase. The use of the written statement for the purpose of notifying department heads of their budget allowance is by far the most important procedure. It eliminates misunderstandings, and gives the department head a definite record of the amount of money that may be expended upon each item in his budget. With a permanent record of this nature the department head is in a position to do some valuable departmental accounting. He also becomes an important factor in budget administration. The conference method is not sufficient to accomplish the foregoing features. It does not provide a permanent record, and its value is therefore limited.

Flexibility of the budget.- In a study of budgets three general factors were discovered which tend to render them more flexible. The data in Table XLII show that in thirteen institutions state appropriations are made in lump sums; for example,

TABLE XLII
FACTORS INFLUENCING BUDGET FLEXIBILITY IN
SIXTEEN TEACHERS COLLEGES

Factors Influencing Flexibility	Number of Institutions
State appropriations made in lump sums.	13
Contingent fund	7
Shifts in budget allowances	14

so much is appropriated for salaries, so much for maintenance and repairs, so much for supplies and equipment, and so much for additions. There may be some question raised as to whether the foregoing funds can be rightfully called lump-sum appropriations. No statement by an authority of what constitutes a lump-sum appropriation could be found. Buck¹ states, however, in a discussion of the defects of a detailed appropriation, that,

"A few states have practically solved this problem in so far as it relates to the form of the appropriation act by the use of lump-sum appropriations supported by itemized schedules

¹Arthur Eugene Buck, Budget Making, p. 141. New York: D. Appleton and Company, 1921.

and with a system of transfers under each executive control. For example, the Maryland budget bills, passed by the 1918 and 1920 legislatures, make two or three lump-sum appropriations to each organization unit."

Buck indicates that appropriations made to three or four broad categories are considered as lump-sum appropriations, although he does not say so definitely. Where lump-sums are appropriated, the president is allowed to distribute the money within the fund as he deems advisable. The allocations made need not be permanent if they do not prove satisfactory since, in a majority of the institutions, shifts can be made within a fund at any time conditions justify it. The educational work of a college cannot be as effective as it otherwise would be where there are many needs which cannot be satisfied. Educational inefficiency is not economical at any cost. Appropriations, therefore, which enable college authorities to meet their requirements to the best advantage represent the most economical financial program.

Seven institutions secure greater budget flexibility by setting up a contingent fund or a fund that has not been allocated to the various budget items. Such a fund is usually under the control of the president and can be used to satisfy minor needs which are not provided for, either in total or in part, by some special budget appropriation. The financial program, therefore, can be made to care for unbudgeted needs which arise during the year. No data were collected regarding the size of this fund except for the fact that the president of institution Number 14 stated that his reserve was a flat sum of \$500, and institution Number 11 stated that its contingent reserve was 2 per cent of the entire budget. No doubt, the necessary amount of the reserve would vary in different institutions, and the demands made upon such a fund would vary from year to year in the same institution. In six of the seven colleges which maintain a contingent reserve the amount is fixed by the state legislature at a flat sum. Reeves and his associates¹ have the following to say about determining the amount of a contingent fund:

"Because of the uncertainties in connection with the income and the unforeseen and unbudgeted needs which arise during the year, a liberal allowance should be provided, probably 3 to 5 per cent of the total budget. The amount should depend upon the experience of the institution in connection with budget operations of previous years."

An institution should study its own needs concerning such a fund and make recommendations accordingly.

¹Reeves, et al, op. cit., p. 465.

Summary

The tentative budget.- In regard to the budget calendar the data show that there is very little agreement regarding the date when work should be started on the budget or when it should be completed. In the majority of institutions, however, the fiscal year begins on July 1. The evidence reviewed indicates that the work on the tentative budget should be begun at least ten months before the beginning of the fiscal year. The budget is composed of two chief divisions in practically all institutions. The divisions are estimates of income and expenditures. The data show that the majority of colleges do not consider the income derived from auxiliary activities in setting up the income budget. This means that the income and expenditures for such enterprises are not administered on a budget plan.

The work on the expenditure budget is initiated by the president in most institutions, but, since this first step is nothing but a routine procedure, the duty might well be delegated to the business manager. The budget is formulated from estimates furnished by department heads in all institutions; this procedure is satisfactory. The practice of collecting estimates by the personal conference or the letter method, which is followed by a majority of institutions, does not meet the requirements of an adequate procedure for collecting budget estimates. It is recommended that special forms be used for this purpose. In exactly half of the institutions no information whatever is furnished the department heads which may be used as a guide in preparing estimates. This practice does not facilitate budget making.

Teachers colleges follow the practice of preparing the tentative budget in a detailed form. They also include comparative data in the form of past appropriations and expenditures. Such items represent valuable phases of a budget. On the other hand, the fact that increases and decreases are not shown in the budget represents a serious defect. Where increases and decreases are shown, it is necessary to include explanations of the changes which have been made. These explanations constitute a very important part of a well prepared budget. After the budget estimates have been tabulated the president either approves the budget or enters upon the task of making the necessary adjustments. In the majority of institutions the department heads are consulted regarding necessary changes, which is a satisfactory procedure.

When the board meets for the purpose of considering the budget each member of this body has had an opportunity to study the budget in most cases. In a few cases a committee of the controlling body makes a study and revision of the budget before it is presented to the entire board. A consideration of the budget

by the board as a whole is a better practice. The president is permitted to attend all board meetings. He has the privilege of discussing phases of the budget upon which the board needs more information. If the budget must be revised it is returned to the institution for this purpose in most cases, but a few boards follow the undesirable practice of making such budget revisions as are necessary without further consultation with the administrative officers of the institutions concerned.

The operating budget.- The evidence secured shows that in general the members of state legislatures have realized the value of making lump-sum appropriations; and at present the majority of institutions receive grants in this form. After the appropriations are made the president assumes major responsibility for making allocations to the various budget items. He utilizes the advice of other college officials, however. It is important to note that the tentative budget outline is followed very closely in making the allocations to the operating budget.

There is a tendency to require the approval of the working budget by state authorities before it can be placed in operation. After the approval of the budget, nine institutions notify department heads of the exact status of their budgets by means of written statements. In one case the personal conference method is employed. In many institutions, therefore, the department heads do not receive any information regarding their allowance.

A study of the available data shows clearly that a flexible budget is more easily administered than a highly restricted budget. In order to render the budget more flexible, teachers colleges employ lump-sum appropriations, shifts in budget allowances, and contingent funds. The contingent fund is employed by far too few institutions.

CHAPTER IV

FINANCIAL REPORTS

One of the most important duties of a college business manager is the development and preparation of such reports as are needed by local officials in financial administration and such reports as are needed to verify the integrity of their stewardship in the management of institutional funds. This chapter aims to outline and analyze the present status of financial reporting and to set up a reporting procedure that will eliminate existing defects.

Reports Prepared by Local Officials

Monthly reports.- A careful study of financial reports revealed that three general types are issued by the co-operating colleges, namely, monthly, annual, and biennial reports. An examination of Table XLIII reveals two important facts concerning monthly reports. First, the majority of the presidents are not

TABLE XLIII
OFFICIALS WHO RECEIVE COPIES OF THE MONTHLY REPORTS IN
FOURTEEN TEACHERS COLLEGES

Officials Receiving Reports	Number of Institutions
President	7
State officials	4
Board of control.	3

utilizing a very important instrument of control in connection with the administration of the budget; and second, no monthly reports whatever are prepared for the department heads. In the administration of a financial program the president should examine carefully at various intervals the progress which is being made; otherwise, tendencies which may prevent the realization of the plan may not be discovered until it is too late to check them. With such data as are contained in a properly prepared report the adequacy of the existing program may be determined with a fair degree of accuracy and revisions made where the facts

justify such a procedure. A properly revised financial plan would include both shifts in appropriations and retrenchments in budget expenditures. The financial report provides the best means of securing information that shows exactly what is taking place and what may be expected to take place under ordinary circumstances in financial administration. Presidents who are not making use of frequent budget reports must of necessity base their decisions concerning business problems upon limited information.

Where the department head is not provided with information concerning the status of his budget allotment, he is unable to assist in controlling expenditures. He does not know whether the requisitions he prepares come within the limits of the available revenue; therefore, he is never sure that it will be possible for the purchasing agent to supply the material requested. The department head is also unable to make a definite plan of purchasing that he is sure is justified by his budget allowance. In other words, this official must simply guess at the procedure he should follow when he has no financial statement to direct him.

An analysis of the financial statements prepared for the presidents shows that there is wide variation in the form and organization of the report and the information included. In fact, these reports are so different that it is practically impossible to present an analysis of the contents or the organization of the material included other than to say that they all contain a statement of income and expenditures. A study of individual reports will reveal the weak and strong phases of each, however. In selecting examples an effort has been made to present reports and parts of reports that show a complete range of the content, including its organization, of the various financial statements now issued by the institutions. Figure 8 is a duplicate of the monthly report issued by institution Number 16. An examination of this

PRESENT BUDGET IN OPERATION

STATEMENT OF RECEIPTS AND DISBURSEMENTS

RECEIPTS	Recd. thru Nov. 30	Budget 1930-31
Dormitory Receipts		
Grant Co. Income		
Grant Co. Liby. Fund		
General Appr. (Includes Htg. Plant Spec. Appr.)		
Incidental Fees		
Institute Fees		
Land Income		
Library Fines & Rents		
Library Sales		
Laboratory Fees		

PRESENT BUDGET IN OPERATION (Continued)

Matriculation Fees
Miscellaneous Income
Tuition

Total Receipts

DISBURSEMENTS

Spent thru Nov. 30

Advertising
Appt. Bureau
Art Department
Athletics
Biology Dept.
Campus Expense
Car and Truck
Chemistry Dept.
Commercial Dept.
Commencement Expense
Dormitory Expense
Education Dept.
Entertainment
Fuel
Furniture and Fixtures
High School Department
History Department
Home Economics Department
Heating Plant
Interest and Insurance
Janitor Supplies
Kindergarten Dept.
Labor
Library Expense
Library Reference
Library Grant County
Light and Power
Manual Arts Dept.
Miscellaneous Expense
Music Department
Mustang
Office Expense
Physics and Math
Printing
Permanent Improvement
Psychology Dept.
Repairs
Regents
Salaries
Telephone and Telegraph
Traveling Expense
Water

Total Exp.

Fig. 8.- Monthly report issued by institution Number 16.

report shows that there has been no attempt to organize the information presented except to separate income and expenditures.

This may be considered as an operating statement since it presents both income and expenditures in totals. The totals of income, listed by sources, show the budget estimates and the amount collected through a certain date. No figures are given which show the budget appropriations or the amount realized during the past year; neither is the amount realized at a corresponding date during the previous year shown. The comparative data needed in evaluating the progress made toward the realization of the financial program are lacking. A similar situation exists in regard to expenditures. It is also noted that this phase of the report fails to show the encumbrance or free balance of the various budget allotments. There is no separation of the expenditures for strictly educational purposes and for auxiliary activities. For example, there is only one statement for fuel, and there is no way to determine whether it includes all the fuel consumed by the various activities conducted by the institution. The report presents a total of dormitory expenses, but it is impossible to analyze such a statement since no distribution of these expenditures is shown. Furthermore, the organization of the data presented in this report is very poor. It would be difficult to obtain from the document a true picture of the expenditures for any of the chief functions of the institution such as administration, instruction, or the operation and maintenance of the physical plant. The organization employed in compiling the material does not recognize functional classifications. In a study of reports made by Arnett,¹ he states that,

"In the report of _____ College all current operations were included in one statement and the items arranged in alphabetical order, probably the most illogical and uninforming method possible."

This quotation is an accurate description and evaluation of the foregoing report.

Figure 9 is a copy of the monthly report prepared by institution Number 7. This report, though limited in scope, is better organized than the report prepared by institution Number 16. There are two main divisions of the report, namely, personal service, and maintenance. The appropriations are distributed to the sub-headings under the main divisions. Besides the amount appropriated to each item, the report shows the amount vouchered, the cash balance, the outstanding obligations, and the available balance for each appropriation. The report possesses several points of merit. It is noted, first, that appropriations and expenditures are presented according to a definite organization,

¹Arnett, op. cit., p. 111.

STATEMENT IN CONNECTION WITH STATE FUNDS

MARCH 1, 1931

	<u>Appropriation</u>	<u>Amount Vouchered</u>	<u>Cash Balance</u>	<u>Outstanding Obligations</u>	<u>Available Balance</u>
<u>PERSONAL SERVICE</u>					
A-1, Salaries.....					
Student Fees to date. . . .					
A-1, Wages					
<u>MAINTENANCE</u>					
Total.					
Distribution of Maintenance:					
C & D.					
E.					
F.					
H-6.					
H-7 & 8.					

Fig. 9.- Form used by institution Number 7 in making the monthly report.

and that they are classified on the basis of character. Second, the true status of each account is also shown, since the report presents a record of the appropriations, expenditures, encumbrances, and the free balance of each. A further analysis of the foregoing report also reveals many weak points. The scope covered by the report is very limited, and there is no report on auxiliary activities which includes the important features listed for state funds. A separate report is made on auxiliary activities, but the total of available balances for each activity is all that is shown. It is also observed that the report does not contain a statement concerning the status of plant or agency funds. A monthly report is used by the president mainly as an instrument of budget control. When the appropriations and expenditures reported are classified on the basis of character, the possibility of making a careful study of budget appropriations and expenditures in detail according to organized units is eliminated. The value of the report as an instrument of budget control, therefore, is materially lessened, since it is very difficult to discover possible budget adjustments which will aid in meeting unforeseen needs by a study of the totals of a few broad categories. When the data included in monthly reports are compiled according to organized units of administration, the problem of preparing departmental reports is reduced to the mere routine of copying parts of the report presented to the president. Departmental reports cannot be made from the report prepared by institution Number 7, however. In discussing reports used for control purposes, Reeves and his associates¹ state that,

"The expense section of the budget report should display in detail the information which has been presented in summary form to the whole board. It should present an exact duplicate of the budget for all departments which have supply, equipment, book, or student-labor budgets."

In the report that is duplicated in the foregoing figure the cash balance is shown, but this information seems to be worth very little. Since the free balance is all that is available for use, it appears that a statement of the cash balance for each account is unnecessary in this report. A further examination of the report shows that no comparative data are included. Some departments may be able to purchase supplies and equipment for the entire year during the first few months that school is in session, while it may be necessary for other departments to distribute their purchases more evenly during the fiscal year. College administrators should be aware of such facts since they aid materi-

¹Reeves, et al, op. cit., p. 576.

ally in budget control, and can be utilized best when placed in the report where direct comparison can be made. The observed weaknesses and suggested changes indicate that the report shown in Figure 9 could be greatly improved.

The best organized monthly report issued by the co-operation colleges is prepared by institution Number 12. The financial statement prepared for the use of the president in this college is a mimeographed document consisting of twenty-nine pages. The index page which is reproduced below shows the material included and the organization used in preparing the report.

<u>Index</u>	Page
Budget Summary	1
Realization of Estimated Income	2
Balance Sheet	3-4
Summary of Fund Transactions	5
Summary of Transactions with State Treasurer	6
Summary of Cash Receipts	7-8
Report on Budget Accounts - Current Support Fund	9-12
Educational Income Fund	13
Report on Budget Accounts - Capital Outlay	13
Summary of Business Income Fund	14
Operating Statement - Dormitory	15
Operating Statement - Cafeteria and Dining Room	15
Operating Statement - College Store	16
Operating Statement - Multigraph Department	16
Operating Statement - Laundry	16
Report on Budget Accounts - Business Income Fund	17
Trust Fund Transactions	18
Student Loan Fund	18-22
Hospital Account - Outstanding Bills	23-25
Seerley Foundation Loan Fund	26-27
Student Organizations	28-29

An analysis of the items shows that the first two schedules in this report present a budgetary summary and a statement of the realization of estimated income. The second schedule presents a balance sheet, and following the balance sheet are statements of educational funds and fund transactions. This leads to a budget report. Similar schedules are presented for capital outlay, auxiliary activities, trust funds, and agency funds. A comparison of the report prepared by institution Number 12 with the monthly report suggested by the National Committee on Standard Reports for Institutions of Higher Education¹ shows that this

¹Suggested Forms for Financial Reports of Colleges and Universities, Bulletin No. 5, p. 5. National Committee on

institution meets the requirements set up by the National Committee with the exception of schedules for restricted funds and for work in process. Since the institutions do not possess endowments, a report on such funds would not be expected. Only two institutions maintain a job department or a special service department which does small job work for other departments or the institution as a whole. As a result, there is no demand for a monthly report on work in process.

Another important feature of the report of institution Number 12 is the cross reference shown in the various schedules. For example, the schedule produced in Figure 10 contains a statement of the realization of estimated income. The cross reference

REALIZATION OF ESTIMATED INCOME

	<u>Budget</u>	<u>Received to July 31, 1931</u>
Tuition - Campus (Visitors and penalty fees)		
Tuition - Branch Summer School		
Tuition - Training School		
Tuition - Pre-School		
Payments from Affiliated Schools		
Special Instructional Fees		
Graduation Fees		
Placement Bureau Fees		
Music Fees (Instrument Rentals and Ensembles)		
Gymnasium Fees (Towel Service)		
Athletics (Gate Receipts)		
Auditorium Rental		
Interest on Daily Balances		
Library Fines		
Hospital Service		
Miscellaneous Sources		
Grant from Spelman Fund		
Extension Tests		
Total (See page 7)		

Fig. 10.- Schedule used to show realization of estimated income in institution Number 12.

given in the report refers to page 7 where a more detailed statement of estimated income is given. For example, in the foregoing

schedule the estimated income and the amount received to July 31 for special instructional fees are distributed to the following sources in the schedule found on page 7 of the monthly report:

Special Instructional Fees

Natural Science

Physical Education (Women)

Commercial

Home Economics

Chemistry

Sub-Total-Special Instructional Fees

The detailed statement permits a check of the income from each item, thereby aiding college administrators in determining what sources, if any, are not producing the income estimated. The cross reference assists materially in locating related schedules in a monthly report.

The budget report is one of the most important financial statements prepared for the use of the president, since the budget and the budget accounts are the very heart of all financial administration. The items listed in the budget report prepared by institution Number 12 are found in Figure 11. In this report columns are provided which show the budget allowance, amount expended during the month, total amount expended to date, outstanding orders and other encumbrances, percentage of allowance expended to date, and the unexpended balance for each item listed. It is noted, however, that this report does not provide a column for comparative data in the nature of past expenditures. Comparative figures are very important in determining the phases of the financial program which demand immediate and future attention of college authorities.

The organization of the data contained in the monthly budget report prepared by institution Number 12 is shown in Figure 11. The first main heading is (I) Educational Purposes. Under this heading comes (1) Instructional Service, (2) Library Service, (3) Instructional Equipment and Supplies, (4) Mimeographing and Multigraph Service, (5) Student Assistants, and (6) Laundry and Towel Service. The budget allowance and expenditures are shown by departments for each of the last four sub-headings listed. Other budget allocations and expenditures are grouped under the main headings of (II) Operation of the Plant, (III) Extension Service, (IV) Branch Summer Schools, and (V) General Control. This survey of budget accounts, as listed in the report, shows that there has been a definite attempt to organize the material presented on a functional basis. The smallest organized unit of administration is represented. The National Com-

Report on Budget Accounts - Current Support Fund
From July 1, 1931, to July 31, 1931

Budget Allowance for Each Item	Amount Expended during July	Total Amount Expended to Date	Outstanding Orders and Other Encumbrances	Per Cent of Allowances Expended to Date	Unexpended Balance in Budget
--------------------------------	-----------------------------	-------------------------------	---	---	------------------------------

CURRENT SUPPORT FUND

- I. Educational Purposes
 - 1. Instructional Service
 - A. Summer Session
 - B. Collegiate Year

Sub-Total

- 2. Library Service
 - A. Administrative Salaries
 - B. Student Assistants
 - C. Library Books & Supplies

Sub-Total

- 3. Instructional Equipment & Supplies
 - A. Art
 - B. Education
 - C. English
 - D. Romance Languages
 - E. Latin, Greek, & German
 - F. Home Economics
 - G. Mathematics & Commercial
 - H. Natural Science
 - I. Physical Science
 - J. Orchestral Music

	Budget Allowance Item	Amount Expended during July	Total Amount Expended to Date	Outstanding Orders and Other Encumbrances	Per Cent of Allowances Expended to Date	Unexpended Balance in Budget
K. Physical Educ. (Men)						
L. Physical Educ. (Women)						
M. Public School Music						
N. Religious Education						
O. Social Science						
P. Teaching						
Q. Pre-School						
Sub-Total						
4. Mimeographing and Multi- graph Service						
A. Art						
B. Education						
C. English						
D. Romance Languages						
E. Latin, Greek, & German						
F. Home Economics						
G. Manual Arts						
H. Mathematics & Commercial						
I. Natural Science						
J. Physical Science						
L. Physical Educ. (Men)						
M. Physical Educ. (Women)						
N. Public School Music						
O. Religious Education						
P. Social Science						
Q. Teaching						
Sub-Total						

	Budget Allowance for Each Item	Amount Expended during July	Total Amount Expended to Date	Outstanding Orders and Other Encumbrances	Per Cent of Allowances Expended to Date	Unexpended Balance in Budget
5. Student Assistants						
A. Education						
B. English						
C. Manual Arts						
D. Mathematics & Commercial						
E. Natural Science						
F. Physical Science						
G. Public School Music						
H. Orchestral Music						
Sub-Total						
6. Laundry and Towel Service						
A. Home Economics						
B. Physical Educ. (Men)						
C. Physical Educ. (Women)						
D. Teaching						
E. Pre-School						
Sub-Total						
Total - Educational Purposes						
II. Operation of the Plant						
1. Salaries and Wages						
2. Fuel						
3. Repairs						
4. Equipment						
5. Maintenance Supplies						
6. Janitorial Supplies						

	Budget Allowance for Each Item	Amount Expended during July	Total Amount Expended to Date	Outstanding Orders and Other Encumbrances to Date	Per Cent of Allowances Expended	Unexpended Balance in Budget
7. Light, Water, and Gas						
8. Bus Maintenance						
Sub-Total						
Less heat, light, and power charged to dormitory and cafeteria						
Less credit from dormitory for electrical, plumbing, and carpentry service						
Net Physical Plant						
III. Extension Service						
1. Administrative Salaries						
2. Clerical Service						
3. Staff Salaries						
4. Operating Expenses						
Total						
IV. Branch Summer Schools						
1. Administrative Salaries						
2. Clerical Service						
3. Instructional Service						
4. Operating Expenses						
Total						
V. General Control						
1. Administrative Salaries						

Budget Allowance for Each Item	Amount Expended during July	Total Amount Expended to Date	Outstanding Orders and Other Encumbrances	Per Cent of Allowances Expended to Date	Unexpended Balance in Budget
A. Executive Officers					
B. Student Health Service					
C. Clerical Service					
Sub-Total					
2. General Office Expenses					
A. Equipment and Supplies					
B. Printing and Publicity					
C. Telephone and Telegraph					
D. Mimeograph & Multigraph Service					
Office of the President					
Office of the Financial Secretary					
Office of the Registrar					
Office of the Dean of Men					
Office of the Dean of Women					
Miscellaneous					
E. Traveling Expenses					
Sub-Total					
3. Auxiliary Agencies					
A. Hospital Food & Supplies					
B. Athletics					
C. Lectures & Entertainments					

Budget Allowance for Each Item	Amount Expended during July	Total Amount Expended to Date	Outstanding Orders and Other Encumbrances	Per Cent of Allowances Expended to Date	Unexpended Balance in Budget
D. Public Speaking Activities					
E. Sunday Services					
F. Commencements					
G. Recreation Park					
H. Placement Bureau					
I. Miscellaneous Items					
Supplies					
Sub-Total					
Total - General Control					
Grand Total - Current Support					

Fig. 11.- Budget report form used by institution Number 12.

mittee on Standard Reports for Institutions of Higher Education¹ recommends that the following headings be employed in preparing financial reports:

- (1) Educational and General
 1. General Administration and Expense
 2. Resident Instruction and Departmental Research
 3. Organized Research
 4. Extension
 5. Library
 6. Operation and Maintenance of Physical Plant and Other General Services
- (2) Auxiliary Enterprises and Activities
- (3) Other Non-Educational Expenses

A comparison of the general headings used in the report by institution Number 12 and the headings recommended by the National Committee shows that they are very much alike although they have a different arrangement. It is noted, however, that colleges included in this study could not make a report on organized research as is recommended by the National Committee since they do not carry on this type of work.

Many of the items included in the report of institution Number 12 are improperly classified. For example, auxiliary agencies are listed as a sub-heading under general control, when they do not function as an agency of general control. Expenditures for commencement exercises are grouped under auxiliary activities; they should be classified, however, as administrative and general expenses.

The monthly report of institution Number 12 also contains a statement of agency funds. No other report in the sixteen colleges contained such a statement. The report on agency funds contains the name of each organization, and there are columns which show the balance July 1, the receipts during July, the disbursements during July, and the balance July 31, 1931. Such a statement presents an accurate picture of the financial standing of each organization.

In addition to the reports made to the president nine of the co-operating institutions prepare a monthly report for the board of control or other state officials. The data secured by an analysis of the content and form of these reports are presented in Table XLIV. The information reviewed shows that the content

¹Suggested Forms for Financial Reports of Colleges and Universities, pp. 46-7. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1931.

TABLE XLIV

AN ANALYSIS OF THE CONTENT AND FORM OF MONTHLY REPORTS MADE
TO BOARDS OF CONTROL OR OTHER STATE OFFICIALS
IN NINE TEACHERS COLLEGES

Content and Form of the Reports	Number of Institutions
Statement of state funds.	7
Statement of local funds.	6
Data presented in totals.	7
Fund transactions given in detail	2
Statement of income and disbursements	3
Balance sheet	1

of the monthly reports made to boards of control and to state departments consists of statements of local and state funds or a statement of income and disbursements. It is also important to note that in a majority of cases only totals are shown. The foregoing data show that there is considerable difference in the monthly reports prepared for the use of the president and those presented to state officials. This difference is due to the interests of the various officials. The local officials are interested in information that will aid in administering successfully a financial program, while the board of control is interested in the results obtained. The needs of the latter officials are satisfied by statements of fund transactions in the form of totals. The status of the various state and local funds or of income and expenditures in the form of totals can be had by summarizing the detailed reports prepared for the president. It is possible, therefore, to develop a set of schedules and report forms which will show the facts needed by both the president and other state authorities. The investigator has developed a set of schedules which will provide the information needed by all interested officials. Information secured by a critical analysis of financial reports and by a study of the needs of the various college officials has been used as a guide in selecting a group of schedules and developing a set of forms suitable for the co-operating colleges.

A critical analysis of the data available shows that a monthly financial report for teachers colleges should contain the following schedules:

Balance sheet

Cash summary

Statement of unappropriated income

Statement of unrealized income
Summary statement of budget appropriations
Separate statement for each organized unit represented in
the budget accounts

As has been shown this general outline for the monthly report meets the requirements of the National Committee on Standard Reports for Institutions of Higher Education.

The balance sheet should show the status of each group of funds operated by the institution at the time the report is prepared. The value of the report may be increased by including data for the corresponding date one year ago. Since the status of the fund groups is to be shown, the various funds and items may be taken from the general ledger control accounts. A set of control accounts with the necessary sub-headings was presented in chapter ii. In setting up a form for a balance sheet only the main headings will be shown. Figure 12 shows a form for a balance

Schedule 1

Balance Sheet

(Date)

	One Year Ago to Date	At Close of Last Year	Present Condition	Increases and Decreases
<u>Current Funds:</u>				
Assets:				
Details				
Liabilities:				
Details				
<u>Loan Funds:</u>				
Assets:				
Details				
Liabilities:				
Details				
<u>Plant Funds:</u>				
Assets:				
Details				
Liabilities:				
Details				
<u>Agency Funds:</u>				
Assets:				
Details				
Liabilities:				
Details				

Fig. 12.- A suggested form for a balance sheet.

sheet which is suitable for use in a teachers college. The form should show cross references to other schedules which give in detail the information that is presented in summary form in the balance sheet.

The monthly report should also contain a schedule showing the cash balance in each group of funds. Figure 13 shows a form and the headings which are suitable for this purpose. Either fund may be sub-divided to meet the demands of the institution.

Schedule 2

Cash Summary

(Date)

<u>Fund Balances</u>	<u>Amount</u>
Current funds:	
For educational purposes	
In state treasury	
In local banks	
For auxiliary activities	
Loan funds	
Plant funds	
Agency funds	

Fig. 13.- Form showing cash summary.

Next to knowing the available cash in each fund, college administrators need to know the amount of money subject to further appropriation. With such information it is possible to work out a program to meet unexpected needs. It is necessary, therefore, to include in the monthly report a schedule showing the unappropriated income. A form which may be used for this purpose is shown in Figure 14: .

In order to check the progress made toward the realization of estimated income it is necessary to prepare a schedule showing the unrealized balances. The investigation has shown that estimates of income are made on the basis of sources. The items included in a schedule should correspond to the sources of income and the columns should show the budget estimates, the amount realized to date, the percentage realized to date last year, the percentage realized to date, and the unrealized balance. Figure 15 presents a suitable form.

Probably the most important instrument of budget administration is the budget itself. In order to exercise the proper

Schedule 3

Statement of Unappropriated Income
(Date)

	<u>Amount</u>
Balance at beginning of fiscal year	
Estimated income for present year:	
For educational purposes	
From state appropriations	
From local sources	
For auxiliary activities	
Total income	
Budget appropriations:	
For educational purposes	
From state appropriations	
From local income	
For auxiliary activities	
Total budget appropriations	
Unappropriated balance	

Fig. 14.- Form showing unappropriated balance.

control over the budget it is necessary for college administrators to have information which shows the exact status of each budget appropriation. The foregoing data regarding reports prepared by certain institutions show that a budget report should present the budget appropriation, the expenditures to date, the encumbrances, the expenditures for the previous year at the same date, and the free balance. There are also times when college administrators need to make a rapid survey of budget conditions. A summary statement of budget conditions is valuable, therefore. It also contains the type of information needed by the board. Figure 16 presents a suitable form which shows a summary statement of budget appropriations based upon the budget accounts presented in chapter 11. The form of the report will depend upon the form of the budget.

Each function or organized unit included in the summary budget statement should be supported by a separate schedule showing the details from which the summary figures are compiled. A detailed schedule for the department of agriculture is presented

Schedule 4

Unrealized Income

(Date)

	Budget Esti- mate	Amount Real- ized to Date	Percent- age Re- alized to Date Last Year	Percent- age Re- alized to Date	Unreal- ized Balance
Educational and General:					
State appropriations					
Student fees					
Interest on deposits					
Rents and sales					
Miscellaneous					
Auxiliary Activities:					
Residence halls					
Dining halls					
Cafeteria					
College book-store					
Athletics					
Laundry					
Multigraphing dept.					
Other enterprises					
Loan Funds:					

Fig. 15.- Form showing unrealized income.

in schedule 6. This schedule will serve as an example for the schedules that should be prepared for each organized unit. At the time the monthly report is prepared carbon copies of the detailed schedules for budget appropriations should be made for the department concerned.

Annual reports.- An analysis of the six annual reports that were provided by the co-operating colleges shows that the organization and form in which the material is presented varies greatly. The material contained in the report, however, is very uniform. Since the facts to be reported are very similar in nature, the difficulty in developing a uniform set of schedules and forms for an annual report is greatly lessened. A study of two of the reports will be sufficient to reveal the types of material included in the form in which it is presented. The outline and the organization of the annual report of institution Number 16 is exactly the same as the monthly report which the institution issues, a copy of which is presented in Figure 8. An analysis of this report shows that it contains statements of only

Schedule 5

Summary Statement of Budget Appropriations

(Date)

	Budget Appro- pria- tion	Expen- ditures to Date	Expendi- tures to Date Last Year	Encum- brances	Free Bal- ance
I. Educational and General:					
A. Admin. and general					
B. Instruction					
1. Academic deans					
2. Details according to organized instructional units					
C. Extension service					
D. Library service					
E. Operation and main- tenance of physi- cal plant					
II. Auxiliary Activities:					
A. Statement for each activity					
III. Other Non-Educational Expenses:					
A. Scholarships and prizes					
B. Interest on indebt- edness					
C. Other expenses					

Fig. 16.- Form showing summary of budget appropriations.

Schedule 6

Department of Agriculture

(Date)

	Budget Appro- pria- tion	Expen- ditures to Date	Expendi- tures to Date Last Year	Encum- brances	Free Bal- ance
Salaries					
Equipment					
Supplies					
Travel					
Other Items					

Fig. 17.- Form showing a departmental budget statement.

income and expenditures. The amounts of each are shown in totals. The defects of this report have been presented under the discussion of monthly reports.

The annual report prepared by institution Number 12 is as follows:

SUPPORT OF SCHOOL FOR YEAR 1930-1931

Amounts on Hand in the Different Funds, July 1, 1930

Funds:	Balances
Support	
Educational Income	
General Improvement	
New Heating Plant	
Dormitory Building Fund	
Business Income	
The Spelman Fund	
Trust Fund	

RECEIPTS FOR YEAR 1930-1931

State Appropriations:

Support:
Administration
Educational Purposes
Operation of the Plant
Extension Service
Branch Summer School

Capital Outlay:
General Improvement
New Heating Plant

Special Funds:
The Spelman Fund
Fees
Other Sources

Current Support Fund:
Administration - Miscellaneous
Physical Plant - Miscellaneous
Educational Purposes - Miscellaneous
Extension - Tests, etc.

Educational Income:

Tuition
Fees and Miscellaneous
Interest on Balances
Hospital

Business Income:

Dormitory
Cafeteria and Dining Room

Balances

Store
Extension Book
Correspondence Courses
Interest on Bonds
Laundry
Printing Room

Trust Funds:

Student Organizations
Student Loan
Music
State Certificate

Grand Total

ITEMIZED EXPENDITURES, 1930-1931

Current Support:

Educational Purposes:

Instructional Service:
Summer Session
Collegiate Year
Library Service:
Administrative Salaries
Student Assistants
Library Books and Supplies
Instructional Equipment and Supplies

Operation of the Plant:

Salaries
Fuel
Repairs
Equipment
Janitorial Supplies
Light, Water and Gas
Bus Maintenance

Extension Service

Administrative Salaries
Clerical Service
Staff Salaries
Study Centers
Extension Classes and Correspondence
Courses
Schools Service
Operating Expenses

General Control:

Administrative Salaries:
Executive Officers
Student Health Service
Clerical Service

General Office Expenses:

Balances

Office Supplies
Office Equipment
Printing and Publicity
Telephone and Telegraph
Traveling Expenses

Auxiliary Agencies:
Hospital Food and Supplies
Athletics
Lectures and Entertainments
Public Speaking Activities
Sunday Services
Commencements
Educational Conference
Recreation Park
Placement Bureau
Miscellaneous Items

Business Income:

Dormitory:
Administration
Janitorial Service
Heat, Light, Water and Gas
Janitorial Supplies
Repairs Equipment
Insurance
Investment
Refunds

Cafeteria and Dining Room:
Administration
Kitchen Service
Equipment and Repairs
Heat, Light, Water and Gas
Foodstuffs and Supplies
Investment

College Store:
Management
Merchandise

Multigraph Department:
Salaries
Supplies
Heat, Light, Water and Gas

Extension Book:

Correspondence Study:
Salaries and Refunds

Interest on Bonds:

Educational Income:
Tuition Refunds
Transfers

Balances

General Improvement
General
Grading and Paving

Heating and Power Plant:
Miscellaneous

Dormitory Building:
Miscellaneous

The Spelman Fund:

Instructional Service:
Summer Session
Academic Year
Equipment
Supplies
Traveling Expenses
Miscellaneous

Trust:

Student Organizations
Student Loan
Music Fees
State Certificates

Total Disbursements for 1930-1931
Less Transfers

Net Disbursements for 1930-1931

Fig. 18.- Annual report form used by institution Number 12.

A comparison of this report with the monthly report issued by institution Number 12 shows many similarities. In fact, the business manager of institution Number 12 stated that the annual report is composed of a summary of the monthly reports. There are certain differences, however. For example, expenditures for instructional equipment and supplies are distributed to the various departments in the monthly report, but they are shown as a combined expenditure in the annual report. This procedure eliminates the possibility of showing the adequacy of budget appropriations in the annual report. A complete picture of financial administration, therefore, is not revealed. The organization units should be included if the report is to correspond with the budget and accounting procedures. Another important difference in the two reports is revealed in a study of column headings. The monthly report presents several columns of figures which are necessary to show the free balance and other desirable information. The annual report presents only figures which show the total income or total

expenditures. This is all that is needed, however, since the annual report is not used as an instrument of budget control.

A study of the six annual reports shows that they include only two schedules, one each for income and expenditures. The National Committee on Standard Reports for Institutions of Higher Education¹ recommends that the annual report include the following schedules:

- Balance sheet
- Statement of current funds
- Statement of income for the year
- Statement of expenditures from current funds for the year
- Statement of restricted expendable funds
- Statement of endowment and other non-expendable income-producing funds
- Statement of loan funds
- Statement of plant funds

The reports prepared by the co-operating colleges do not satisfy the foregoing recommendations. As has been shown the institutions do not include a balance sheet in the annual report. The financial status of a state teachers college is not determined by the amount of its assets and liabilities since this type of institution does not depend upon an endowment for its support. The balance sheet, therefore, is not as important to the reports analyzed as to reports for endowed institutions. It may or may not be included by the co-operating colleges without greatly affecting the value of the report.

The results of the year's operation concerning three other funds, namely, current funds, loan funds, and plant funds are included in the report exhibited in Figure 17, but they are not given a separate schedule. A separate schedule is desirable, however, since it enables the business manager to present all related material as a unit, thereby rendering the report both convenient and more easily understood.

The schedules recommended for restricted and endowment funds are not needed by teachers colleges since such funds are not operated by this type of institution.

A set of schedules adapted to the needs of teachers colleges, and based upon the facts actually included in the six annual reports analyzed has been developed. The schedules in-

¹Suggested Forms for Financial Reports of Colleges and Universities, p. 5. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1931.

clude a statement of current funds, a statement of income, a statement of expenditures from current funds, a statement of loan funds, and a statement of plant funds. A schedule for a balance sheet has also been included for the institutions that wish to prepare such a statement.

If the column headings are changed so as to show only the final results of the year and comparative data of the previous year, the forms exhibited in Figures 12, 15, and 16 are suitable for presenting a balance sheet, a statement of income for the year, and a statement of expenditures from current funds for the year, respectively.

Figure 19 shows a form suitable for presenting a statement of current funds.

Schedule 2

A Statement of Current Funds

(Date)

	Amount Preceding Year	Amount
Balance at beginning of year:		
Add:		
(1) Current educational and general income		
a. From state appropriations		
b. From local sources		
(2) Income from auxiliary activities		
Total income		
Deduct:		
(1) Current educational expenditures		
a. From state appropriations		
b. From local sources		
(2) Expenditures of auxiliary activities		
Total expenditures		
Balance at end of year:		

Fig. 19.- Form for reporting status of current funds.

If other items are needed to show all income and expenditures they should be listed under "Add" and "Deduct."

A form suitable for making an annual report on loan funds is exhibited in Figure 20.

The National Committee on Standard Reports for Institutions

Schedule 5

A Statement of Loan Funds

(Date)

Amount
Preceding Amount
Year

Balance at beginning of year:

Additions during year:

Details according to sources

Deductions during year:

List each item

Balance at end of year

Fig. 20.- Form for reporting status of loan funds.

of Higher Education¹ recommends that the reports for plant funds be divided into two parts. The first part should show the status of the unexpended portion of the plant fund, and the second part should show the status of plant investments. Figure 21 exhibits a form which meets this recommendation.

Biennial reports.- The entries in Table XLV show that the contents of biennial reports are exactly the same as those of annual reports. In fact, five of the six biennial reports analyzed were composed of two annual reports. Practically the only difference in the two documents is the time of issue. Since the nature of the facts to be reported is exactly the same in both of the foregoing statements, the set of schedules developed for the annual report is also suitable for the biennial report. The criticisms and recommendations concerning the yearly report are also applicable to the latter statement.

Audits

Selection of auditor.- A study of audits shows that the auditor or auditors are selected by some member of the state finance department in twelve institutions, while the board of control makes the selection in three cases. It is important that

¹Suggested Forms for Financial Reports of Colleges and Universities, p. 50. National Committee on Standard Reports for Institutions of Higher Education. Champaign, Illinois: The Press of Flanigan-Pearson Co., 1931.

Schedule 6

A Statement of Unexpended Plant Funds

	Amount Preceding Year	Amount
Balance at the beginning of the year:		
Additions during year:		
List each item		
		Total additions
Deductions at end of year:		
List each class of expenditures such as land and buildings		
		Total deductions
Balance at end of year:		

A Statement of Funds Invested in Plant

Value of plant at beginning of year:	
Additions during year:	
List each addition	
	Total additions
Deductions during year:	
List each item of property disposed of and amount of indebtedness	
	Total deductions
Value of plant at end of year:	

Fig. 21.- Form for reporting status of plant funds.

the proper official or officials be appointed to select the auditor and outline his program of work. A person directly connected with the business affairs of the institution may become unduly interested in one or more of the financial aspects of the institution, or there may be certain phases to which such a person would give special attention, or phases which he would not care to have uncovered by an auditor. The vested interest of such a person would likely affect the auditor's program. An auditor's work, however, should be free from all personal influence, other-

TABLE XLV

ANALYSIS OF CONTENTS OF BIENNIAL REPORTS IN
SIX TEACHERS COLLEGES

Contents	Number of Institutions
Introductory remarks.	4
Cash balance at beginning of biennium	3
Statement of income by sources.	6
Statement of expenditures in totals	6
Classified by funds	5
Alphabetical list	1

wise the report will not represent an accurate statement of financial conditions. In order to secure an audit that is independent of all personal prejudices, the auditor should be selected by some one who is free to develop an auditing procedure that will not be influenced in any way by previously delegated financial responsibilities. The present method of selecting the auditor meets this requirement.

The qualifications of the auditor selected are also important. No institution would expect an accurate statement of financial conditions from an auditor who is not prepared to make such a study. The three institutions in which the board selects the auditor state that a certified public accountant is always employed. No information could be secured about the qualifications of the auditors employed by the finance department. However, it is likely that a state finance department would use only certified public accountants.

Regularity of audits.- Data concerning the regularity of audits are presented in Table XLVI. The prevailing tendency in the co-operating colleges is to audit accounts at regular intervals, either annually or biennially. One of the chief purposes of an audit is to check the results of financial administration over a complete fiscal period, and to see that all income and expenditures for this period have been legally administered and accounted for. The financial plan of the entire group of colleges is outlined on an annual basis. An audit which shows a complete picture of this fiscal period should be made annually. Although state appropriations cover a two-year period, they are made on the basis of annual needs. The annual audit is more in harmony with the entire plan of college administration than the biennial audit.

TABLE XLVI

DUTIES OF AUDITORS AS INDICATED BY FIFTEEN TEACHERS COLLEGES

Duties	Number of Institutions
To make a check of income and expenditures.	15
To determine whether or not the college has complied with the law	5
To provide constructive criticism of accounting procedures.	2

A discussion of the irregular audit with college presidents disclosed the fact that the interval between audits is usually greater than one year. The undesirable features of the biennial audit are applicable to this type of an irregular audit. The inquiry revealed the fact, however, that an irregular audit has the desirable feature of making it necessary for the institution to keep its books in good condition at all times provided the audit is made often enough. This fact indicates that the irregular audit should be thought of as a continuous thing, and that it should probably be conducted more than once a year. All institutions should provide for a regular annual audit, however.

Content of audit reports.- The data obtained by an analysis of the audits of ten teachers colleges are presented in Table XLVII. An examination of the facts introduced shows that the schedules found in the audits are based, for the most part, on funds. This procedure is due chiefly to the fact that state appropriations are made to certain funds. State officials are interested in determining if college authorities have complied with the law in spending state money, and an audit of funds provides such a check. This conclusion is further verified by the fact that separate schedules are prepared for state and local funds. Separate schedules for local funds also provide a check on the amount of money collected and the amount that should be collected by the institution. An audit which shows the exact status of each fund operated is very satisfactory.

The audits examined were found to contain much detailed material. If an auditor is to be sure that his statement of any fund is correct he must make several checks and proofs of the conclusions reached. For example, in order to be certain that a schedule showing the status of local income from tuition is accurate the auditor must make a check of all receipts issued, and it is also necessary to check the enrollment records to see that

TABLE XLVII

CONTENTS OF AUDITS MADE IN TEN TEACHERS COLLEGES

Contents	Number of Institutions
Letter of explanation	4
Letter of transmittal	4
Statement regarding bonded officials.	2
Schedules showing appropriations by funds	10
Schedules showing disbursements of appropriations by funds.	10
Schedules showing outstanding obligations of ap- propriations by funds	6
Reconcilement with official depository.	8
Schedule showing cash receipts (such as student fees)	8
Statement of bank deposits.	7
Schedule showing expenditures from cash receipts.	8
Reconcilement of bank deposits and expenditures	2
Schedule showing income from auxiliary activities (a separate statement for each activity).	8
Schedule showing expenditures for auxiliary acti- vities (a separate statement for each activity)	8
Schedule showing refunds from the revolving fund.	3
Schedule showing receipts and disbursements in student activity fund	2
Schedule showing outstanding obligations of student activity fund	1
Schedule showing condition of contingent fund and reconcilement with bank or state account.	2
Statement of extension fund	2
Statement of student loan fund.	2
Statement of examination fund	1
Statement of diploma fund	1
Detailed statement of insurance coverage.	2
Statement of bad checks	3
Statement of assets	5
Balance sheet	2
Certification of the report	1

there is a receipt for each student enrolled. In addition to this information, a schedule showing refunds must be prepared. The statements of an audit are not likely to be very accurate if such checks are not made. The present auditing procedure is satisfactory from the standpoint of checks and proofs.

A serious defect in the audits of the co-operating colleges is noted in the fact that very little criticism of existing business or accounting procedures is included. All available evidence indicates that audits in this group of colleges are made by experts. They should know what constitutes a satisfactory

business or accounting procedure. The data presented in chapter ii, however, showed that great improvement could be made in financial accounting. The lack of suitable criticism is due, no doubt, to the fact that the request for such information has not been included in the auditor's program. Constructive criticism would probably be of most value to the president, and he should see, therefore, that the auditor's official directions provide for such information. The criticism should be carefully evaluated, however, before definite changes are made in business procedures. This is especially true where auditors are employed who do not appreciate the difference in institutional and commercial accounting.

A further examination of the entries in Table XLVII shows that only two of the ten audits contain a complete balance sheet. Five audit reports contained a statement of assets, but no statement of liabilities was given. Such a balance sheet is not complete. This defect is due to the fact that the majority of institutions do not maintain accounts for assets and liabilities. The information for preparing a balance sheet, therefore, could not be readily obtained. Since teachers colleges should operate accounts which show all assets and liabilities, and since the audit is the official statement of the legality and integrity with which all income and expenditures have been administered, a complete statement of assets and liabilities should be included in this document. The balance sheet is probably the most convenient method of presenting the material.

The form used in the preparation of the various schedules listed in the ten reports varied in minor detail among the institutions. In general, however, the form contained space for the fund or the various items under the fund and for the income belonging to the fund. Another schedule was prepared showing similar space for expenditures. In many cases a third schedule was set up to show the commitments against the particular fund. Such a procedure makes it necessary to review several different schedules in order to arrive at a definite status of a single fund. This is not a convenient method of presenting the material. The audit in institution Number 3 used the form shown in Figure 22. This schedule presents the material compiled by the auditor in a compact form, and it can be carefully examined with but very little trouble. It does not provide for an exact statement of the fund, however, since the commitments which have not been liquidated are not included. It is recommended that a column be added for outstanding obligations and that the form be employed by all institutions.

The foregoing discussion justifies the conclusion that

<u>Regular Appropriations</u>	<u>Amount of Appropriation</u>	<u>Disburse- ments</u>	<u>Balance</u>
Salaries			
Departmental Maintenance			
Repairs, Replacements, and Improvements			

Fig. 22.- Form used in audit by institution Number 3.

the audit should contain a complete check of all funds operated by the institution, and provide schedules which show the exact status of all units in each fund. For example, under current funds, the schedules for revolving funds should present the financial condition of each activity. All petty cash and working reserves should be carefully checked under their proper fund group. The audit should also provide constructive criticism of all accounting and business practices.

Summary

Reports prepared by local officials.- The facts which have been presented in this chapter show that teachers college officials regard the monthly financial report chiefly as a device used for informing the president, the board of control, the members of the legislature, and the public in general of the financial status of the institution. It seems that far too few institutions recognize the value of reports in financial administration.

The investigation showed that three types of reports, classified on the basis of the time issued, are used by teachers colleges; they are monthly, annual, and biennial. The information secured disclosed two important facts regarding monthly reports. First, many teachers college presidents are not utilizing the services that may be rendered by a monthly financial statement, and second, no monthly reports are prepared for department heads. An analysis of the contents of monthly reports prepared for the president shows that there is a variation in the form and organization of the reports and the information included. In some reports the form in which the information is presented consists of an alphabetical list of items and the total income and expenditures. The information in the report of institution Number 12, however, is organized on a definite basis such as a functional classification of expenditures in the budget report, and the form provides space for such items as appropriations, expenditures to date, encumbrances, and free balances. The majority of reports show nothing more than income and budget expenditures. The report

of institution Number 12 presents a balance sheet, a statement of unrealized income, a statement of fund transactions, and schedules for plant funds, auxiliary activities, loan funds, and agency funds. This report also contains cross references to explanatory schedules which aid greatly in analyzing the report. There is a noticeable lack of comparative data and written explanations in the report, and many of the expenditures have not been properly classified.

Approximately 37 per cent of the institutions prepare an annual report. An analysis of these reports shows that they are concerned chiefly with current operations. As a result, they show very little more than a statement of income and disbursements. The data concerning income are organized on the basis of source, but no general tendency is shown in the organization of the material relative to disbursements. The items upon which reports are made are very much alike in the annual and monthly report, but the annual reports present totals instead of detailed data. No balance sheet is shown in this type of report. The balance sheet is probably the least important item in the financial report, although it may be included in the statement if desired.

The facts presented show that the biennial report is composed of two annual reports in most cases. If the annual report is prepared with the understanding that two such reports are to make up the biennial reports, the preparation of the latter should be merely a clerical job.

Audits.- The auditing procedure, in so far as available data indicate, is satisfactory in a majority of the institutions. The time between irregular audits is often greater than one year. A combination of the regular and irregular audits so as to provide a continuous check on institutional finance constitutes a satisfactory auditing procedure.

The present investigation reveals the fact that making a check on income and expenditures has been the chief duty assigned to auditors. Only two institutions believe that it is the duty of the auditor to take cognizance of deficiencies in business procedures and to recommend remedies for the situation.

The evidence presented reveals that the audits provide schedules for three main types of funds, namely, state appropriations, funds made up of local income devoted to educational purposes, and revolving funds. In a few cases subsidiary schedules are included for such items as bad checks, insurance, diploma fund, and extension funds.

CHAPTER V

THE ADMINISTRATION OF PURCHASING AND STORES

In order to secure the information prerequisite to outlining an adequate procedure for administering and accounting for purchases and stores, purchasing agents and business managers were interviewed concerning the problem. The questionnaire used in the interview covered such topics as the purchasing organization, the supervision of purchasing, the purchasing routine, and the operation of stores. Additional data were secured by analyzing the forms used in performing the function of purchasing. It is the purpose of this chapter, therefore, to present a critical analysis of the data collected and to recommend changes in the present practices where the evidence justifies such a procedure.

Local purchasing organization.- A study of the purchasing function in sixteen teachers colleges reveals certain facts which indicate the type of purchasing organization existing in this group of colleges. An examination of the data in Table XLVIII shows that in practically all institutions the purchasing agent is responsible to the president. This close relationship between the officials who administer the educational and purchasing functions represents a desirable situation. Since the president has direct control over both functions, he should certainly be able to harmonize the activities of each.

Table XLVIII also shows that there is a tendency to centralize the purchasing function in the business office. This statement is supported by the facts that the business manager acts as purchasing agent in fifteen institutions, and that in fourteen institutions department heads are not permitted to place even emergency orders directly. The centralization of this function is a very important factor in financial administration. The expenditures devoted to the purchase of supplies and equipment constitute one of the important budget items. A satisfactory control over budget expenditures can be maintained only when an accurate knowledge of all budget obligations is at hand. This knowledge cannot be had unless a complete record is made of each budget commitment. The business manager cannot produce such a record, however, unless the responsibility for placing purchase orders has been centralized in the business office.

A study of the detailed steps in purchasing routine which are presented in Table XLIX also indicates that adequate provisions

TABLE XLVIII

FACTORS INDICATING CENTRALIZATION OF THE PURCHASING FUNCTION
IN SIXTEEN TEACHERS COLLEGES

Factors Indicating Centralization	Number of Institutions
The purchasing agent is responsible to the president	15
The business manager is designated as purchasing agent	15
Instructor in manual training designated as purchasing agent.	1
The business manager has authority to purchase supplies.	10
The authority to purchase supplies resides in the state	6
Department heads cannot purchase emergencies directly.	14
Department heads can purchase emergencies directly.	2

have been made for the problems of centralization and financial control. Reeves and his associates¹ state in this connection that,

"There are three important considerations connected with the purchasing function. The first relates to the question of whether or not all purchasing shall be centralized in one office, the alternate being a diffusion of the responsibility among several officials....

It seems clear that purchasing shall be regarded as a part of the business function. A capable business manager can usually obtain much better prices when he is given charge of all the purchasing than when a number of different officers are given this responsibility. Furthermore, unless there is a centralization of purchasing, there is difficulty in controlling commitments, and the institution may find itself embarrassed in facing obligations for purchases which the financial officer did not know had been made, and which may exceed appropriations for the department needs."

The data presented in Tables XLVII and XLIX show clearly that the type of purchasing organization maintained in the co-operating colleges satisfies the requirements set forth in the foregoing quotations.

The supervision of purchasing.- A study of the procedure

¹Reeves, et al, op. cit., p. 436.

TABLE XLIX

PURCHASING ROUTINE IN SIXTEEN TEACHERS COLLEGES

Purchasing Routine	Number of Institutions	
	Distribution	Total
Originates through requisition:		16
With department head.	14	
With faculty members.	2	
Forward requisition from department to business manager for checking against available funds		16
Forward requisition from business office for approval:		16
By president.	12	
By state office	4	
Securing bids on material requisitioned:.		16
By local office	8	
By state office	8	
Preparation of purchase order:		16
By local office	8	
By state office	8	

followed in accounting for expenditures shows that in many colleges the state authorities set up controls in connection with the expenditure of state appropriations. Since purchasing is one means of expending state money, it is also to be expected that state controlling bodies will exercise a certain degree of control in the performance of the function of purchasing. Table L shows that in eleven institutions purchasing is under state supervision, while local supervision prevails in five.

The advantages and disadvantages of state supervision of purchasing as seen by thirteen local agents are shown in Table LI. An examination of the entries in this table concerning the advantages shows that one advantage stands out above all others, namely, that of quantity buying. Eleven local agents reported that the state is supposed to obtain better prices than can be secured by local agents as a result of quantity buying. The advantages in regard to prices as a result of quantity buying are denied by some institutions, however, and in three cases local agents reported that they could buy even cheaper than the state does. One agent pointed out a filing case which the state

TABLE I

TYPE OF AGENCIES INVOLVED IN THE SUPERVISION OF PURCHASING
IN SIXTEEN TEACHERS COLLEGES

Institution	Type of Agencies	
	State	Local
1.	X	
2.		X
3.	X	
4.	X	
5.	X	
6.	X	
7.		X
8.	X	
9.	X	
10.	X	
11.	X	
12.		X
13.		X
14.	X	
15.	X	
16.		X
Total	11	5

bought for \$45, while the local agent claimed that he could have bought the same case for \$37.50. Another business manager referred to a water cooler which could have been bought for at least \$10 less than the state paid for it. Business managers also pointed out that co-operative purchasing could be accomplished by the local agents of state institutions and thereby eliminate many of the undesirable features of state supervision. Frasier and Whitney¹ are of the opinion that, "Perhaps the basic principle of economy in purchasing practice is that of co-operative buying." The centralization in a state office secures co-operative buying, however, since the state agent buys for all the teachers colleges in the state.

An analysis of the disadvantages presented in Table II reveals what local agents believe are the two outstanding defects of state supervision. Eleven business managers stated that supplies could not be secured when they are needed. One business manager exhibited correspondence that had been on his desk for three weeks due to the fact that an order for envelopes had not

¹Frasier and Whitney, op. cit., p. 273.

TABLE LI

ADVANTAGES AND DISADVANTAGES OF STATE SUPERVISION OF PURCHASING
REPORTED BY ELEVEN LOCAL PURCHASING AGENTS

Advantages	Number of Institutions Re- porting	Disadvantages	Number of Institutions Re- porting
Better prices from quantity buying . .	11	Do not get materi- als needed	7
Can standardize supplies.	3	State does not know needs of indivi- dual institutions.	4
Check against spend- ing of institution.	2	Local institution can buy cheaper in most cases	3
In position to get what was bought . .	2	Some firms will not bid on state orders	1
		Do not get material when needed. . . .	11
		Fewer cash discounts	1
		Greater possibility for graft.	1
		Waste of money on small items. . . .	1

been filled by the state purchasing agent. To be sure, the local agent could be criticised for allowing his supply of envelopes to run low. The example does point out, however, the disadvantage of such delays. The second important defect of state supervision of purchasing, as reported by seven local agents, is the fact that the state does not furnish the kind of material needed by the institution. In many cases the state department is located at a great distance from the various state colleges. State officials, therefore, are not in a position to know the needs of the individual institutions. This is likely to cause delays in filling orders, and, no doubt, it is a hindrance to the state purchasing agent in studying the peculiarities of the various institutions. A few agents reported such disadvantages as the refusal of some firms to bid on state orders, fewer cash discounts, a greater possibility for graft, and a waste of money on small items.

Morey¹ has the following to say concerning state supervi-

¹Morey, op. cit., pp. 70-1.

sion of purchasing:

"It is often proposed that the purchasing for state universities and colleges shall be handled through a central state purchasing agent. Such an arrangement is advantageous only to a limited degree. In the buying or contracting of commodities of a standard nature used alike in all state institutions and departments, savings may be effected which are of advantage to both the state and the institution. Otherwise little financial gain is possible through a central state office, and the materials which can be standardized are not as a rule extensive....

A state university or college of reasonable size should have its own purchasing agent, who should work in co-operation with the state purchasing officer, but who should have authority to make any purchase which is advantageous to the institution."

The quotation indicates that Morey does not believe the advantages of state purchasing to be exceedingly important.

The vital question to be settled in connection with state purchasing is whether the amount saved in quantity buying by the state is sufficient to outweigh the advantage of purchasing the kind of material needed and securing it at the time it is needed by the institution. The evidence available is not sufficient to warrant a definite conclusion regarding this question. Local agents, however, are unanimously in favor of local autonomy.

Checking supplies received.- That phase of the purchasing routine which involves the invoice is exhibited in Table LII. A careful examination of the data in this table shows much variation in practice with respect to the checking and the approving of the invoice. The practice of filing the invoice in the local office is rather uniform, however, except where state regulations require that this record be filed in the state office.

The evidence shows that the responsibility for checking and approving invoices falls either upon the department head or the business manager in the majority of cases. In the co-operating colleges, orders are usually placed when a need for the supplies arises, and, as a result, the amount of the material is not very great. Purchases made in this manner go directly to the department when received since there is no surplus to be stored. Where the business manager checks such orders, the material must be unpacked, checked, and repacked before it can be forwarded to the department. Such a procedure is a waste of time, and since the checking is a simple routine duty it may just as well be performed by the department head. A few cases were found where the business office keeps a supply of certain articles

TABLE LII

DISPOSITION OF THE INVOICE WHEN MATERIAL IS RECEIVED
IN SIXTEEN TEACHERS COLLEGES

Routine	Number of Institutions	
	Distribution	Total
Checking of the invoice		16
By department head.	7	
By department head and business manager	6	
By business manager	1	
By storekeeper.	1	
By superintendent of buildings and grounds	1	
Approval of the invoice		16
By department head.	6	
By business manager	5	
By state purchasing agent	3	
By department head (a duplicate purchase order).	2	
Filing of invoice		16
In local business office.	10	
In state office	6	

which are used by all departments such as paper, envelopes, and ink. It would be useless to send such orders to some department where they may be checked and returned to the office for distribution. Shipments containing general supplies should be checked in the office where proper storage is provided. The evidence shows that in general the invoice is approved by the official who checks the material against this record. This procedure is satisfactory since the individual checking the material should know whether an approval is justified.

Printed forms and instructions relating to purchasing.-

The investigation revealed the fact that certain forms and printed instructions facilitate the operation of the purchasing function. Four institutions supply department heads with printed instructions for drawing requisitions, while twelve do not provide any instructions in writing. A carefully constructed list of instructions tends to produce uniformity in handling requests for supplies, thereby increasing the efficiency of the purchasing department. At least, requisitions which are properly prepared should minimize delay since it would not be necessary to return requests

for further information or correction. Lack of the right information, which resulted in delays in placing orders and in extra work in the business office, was discovered in several institutions which had not issued the proper instructions regarding the preparation of requests.

In order to determine the information contained in properly prepared requisitions, the requisition forms of the sixteen teachers colleges were analyzed. The information secured is presented in Table LIII. The data fall naturally into two main divisions. First, there is a great deal of information which should be entered on a requisition blank which relates indirectly to the supplies or materials desired; the date, the requisition number, and the account to be charged are good examples of this type of information. This information is necessary, however, if the entire routine connected with purchasing and making the proper records of the financial transactions is to be accomplished with efficiency. The second type of information is related directly to the supplies requisitioned; the quantity desired, the description of each article, and the estimated cost are good illustrations.

The department head is not required to furnish all this information. Facts regarding the fund out of which the bill is to be paid, the appropriation balance, and the date the supplies are received should be provided by the business manager who is also the purchasing agent in this group of colleges. The department head does not possess information concerning the fund that should be charged with a given expenditure. Only seven of the sixteen requisitions studied provided space for the name and address of the company from which the supplies were to be purchased. It is the purchasing agent's duty to provide this information, but this official may ask the department head for his preference of companies. If the department head can supply such information, it saves the purchasing agent considerable time.

The unencumbered balance of the budget appropriation is shown on the requisition of five institutions. It is not necessary to list these figures on the requisition since the signature of the business manager indicates that the budget appropriation has been checked and that sufficient funds are available to cover the estimated amount of the requisition. Even if the president is to approve the requisition the amount of the free balance is not needed.

Five institutions employ a requisition which provides space for listing the quantity of supplies on hand similar to the supplies requisitioned. It is difficult to justify the inclusion of this item. It would be an inefficient department that would

requisition an article with a full supply on hand. This is especially true in state institutions where budget appropriations are apt to be based on absolute necessities.

Nine of the sixteen institutions do not provide space on the requisition blank for the purchase order number. It is often necessary during the process of auditing accounts to trace expenditures to their origin, and if the order number has been placed on the requisition a ready means of identification is available. The order number also assists materially in tracing orders which are not filled immediately. It is recommended that the requisition provide a space for the order number.

Table XLIX showed that the business managers in eight institutions secure bids before purchasing supplies. The tendency in this group of eight institutions is to employ the letter method in securing bids on material needed. The use of the typewritten letter in asking for bids on certain articles leaves the supply company practically free concerning the information supplied and the form in which it is prepared. The bids, therefore, are not likely to be uniform in the information they provide, and the business manager may be forced to submit a second request in order to secure the desired facts. A comparison of bids is difficult to make when they have been set up in different forms and units, and under such conditions it may be necessary to re-organize the data for the purpose of study. A bid form will aid materially in eliminating the foregoing defects since it provides for definite, uniform information which is arranged in the exact form needed by the institution.

Table LIV shows the information contained in the order forms used in thirteen teachers colleges. A study of this information reveals that it is very much like the information contained in the requisition form. The information relates both directly and indirectly to the supplies ordered. Information related indirectly to the supplies ordered consists of the date, the signature of the business manager, and the name and address of the firm. Information which relates directly to the material ordered is the quantity, the description, and the price of each article.

A further study of the information presented in Table LIV reveals the important fact that the purchase order blank provides space for certain information which is of interest to local officials only. Such facts as the requisition number, the date material is received, the account to be charged, and the voucher number are good examples of this type of information. Since the vendor would not be interested in facts of this nature, space for recording them should be provided only on the copy of the purchase order filed in the business office. The foregoing in-

TABLE LIV

ITEMS OF INFORMATION CONTAINED ON THE PURCHASE ORDER BLANKS OF THIRTEEN TEACHERS COLLEGES

Institution	Name of College	Date	Order Number	Registration Number	Name and Address of Firm	Method of Shipment	Destination of Order	Date Wanted	Instructions	Approved	Terms	Date Received	Code or Account Number	Date Paid	Voucher Number	Signature of Business Manager	Catalogue Number or Item	Quantity	Description of Articles	Price	
Total.	13	13	9	5	13	9	8	3	12	1	2	3	4	2	2	13	4	13	13	13	
1	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	X	.	X X X	.	X X X	X X X	X X X	X X X
2	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	X	.	X	X X X	X X X	X X X
3*	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
4	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
5	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
6	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
7	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
8*	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
9	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
9'	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
10	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
11	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
12**	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
13	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
14*	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
15*	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X
16	.	X X X	X X X	X	X X X	X	X X X	.	X X X	.	.	.	.	.	.	.	.	.	X X X	X X X	X X X

*State prepares the purchase order.

**Purchase orders are prepared after special permission is secured.

***A printed purchase order is not used.

'Purchase order is used in connection with auxiliary activities.

formation shows that the financial transaction involved in the purchase has been completed and that the purchase order is ready for filing in the paid file. It also forms the connecting link between the purchase order and the various books of accounting. The order blank, therefore, should provide space for such information, but in many institutions these facts are not given.

Twelve institutions provide brief instructions concerning the procedure to be followed in filling orders. The following list presents a good example of the instructions furnished vendors:

INSTRUCTIONS TO VENDORS

All bills must be rendered upon the standard form supplied by the state known as the "Claim Voucher." A set of these blanks accompany this order. Send all five copies direct to the office to which you deliver the goods. Render a separate bill covering each purchase order immediately upon making shipment.

Show cash discount to which the state is entitled on your bill.

Additional billing blanks will be furnished upon application.

Responsibility cannot be accepted for goods shipped unless covered by a signed purchase order.

Delivery memorandum should accompany each delivery so that goods can be identified.

Place purchase order number on all bills, shipping tags and delivery memos.

All goods ordered and received are subject to test and inspection, and if rejected shall remain the property of the vendor.

A well prepared set of directions concerning a procedure in filling orders, which is suitable for the institution, is valuable since it aids in securing the exact information needed in performing the routine duties involved in handling orders received. The business office is enabled to liquidate the financial obligations involved with greater promptness when complete information concerning the transaction is available. In some colleges, the directions are printed on the back of the invoice which is furnished the supply company, a practice which simplifies office forms since the invoice can be made to serve two purposes.

When delays in filling orders occur, it becomes necessary for the purchasing agent to communicate with the firm regarding the situation. All sixteen institutions employ a typewritten letter in communicating with supply companies concerning delays. The data in Table LV show that the letter contains a description of the articles ordered and a discussion of the exact status of

TABLE LV

CONTENTS OF LETTERS EMPLOYED IN TRACING ORDERS PLACED BUT NOT FILLED IN SIXTEEN TEACHERS COLLEGES

Institution	Contents of Letters					
	Order Number	Date of Order	Description of Articles Ordered	Quantity Ordered	Price	Status of Order
1.	X	X	X			X
2.	X	X	X	X		X
3.	X	X	X			X
4.	X	X	X			X
5.						X
6.						X
7.	X	X				X
8.	X	X	X			X
9*	X					X
10.		X	X			X
11.		X	X			X
12.	X		X	X		X
13.						X
14.	X	X	X			X
15.	X	X	X	X		X
16.	X	X	X	X	X	X
Total	11	11	11	4	1	16

*Letter goes to state purchasing agent.

the order. The letter must be dictated by the business manager and copied by the typist, thereby consuming the time of two people. The method of follow-up now in use may be greatly improved by using a tracer form. Only one institution employs such a form, however. An examination of the form exhibited in Figure 22 reveals the advantages to be gained by its use.

Such information as the location, order number, and date can be supplied by the typist merely by copying it from the purchase order. The body of the form consists of printed statements which are adapted to an inquiry concerning orders that have been placed but not filled. The status of any order can be shown, therefore, by the use of a check mark, and, as a result, time is saved and efficiency is increased. Since the purchasing agent in this group of colleges is also the business manager and has many other duties to perform, it is doubly imperative that every device possible be employed that will facilitate business routine.

Operating a storeroom.- The investigation revealed the

NAME OF COLLEGE
OFFICE OF BUSINESS MANAGER

Location _____

Referring to our Order No. _____

Date _____

☐ Please hurry shipment and advise definitely when shipment will be made.

☐ Have received only part of material, please advise fully relative to balance.

☐ Material received--have no invoice. Please send immediately.

☐ Material not received--urgently needed. Please trace.

☐ _____

☐ _____

Yours very truly,

Business Manager

Fig. 23.- Printed tracer form used in institution Number 7.

fact that only four of the sixteen institutions operate a storeroom. This statement has reference to a storeroom where general supplies are collected for distribution to the various departments of the institution. Several of the colleges distribute a few items such as stamps, pencils, and probably envelopes from the business manager's office. This office has not been considered as a storeroom, however, since there has been no attempt to place in stock the great bulk of the supplies needed. A number of colleges operate a store as a supplementary business enterprise, but this discussion is not concerned with that type of store. In discussing the merits of a storeroom, Frasier and

Whitney¹ state that,

"The advantages of the storeroom are numerous. In the first place, it makes possible the purchase of supplies in large quantities. In the second place, it makes supplies available when they are needed....

Many requests are made for very small items, so small in fact that it would not pay to go through the necessary machinery of writing requisitions, getting bids, and making purchase orders. Most of the items of this type are handled through the storeroom."

The two factors of service and economy are worthy of serious thought when considering the problem of a storeroom. If supplies are of value in the operation of a college, they should certainly render the greatest service if they are always available when needed. Supplies can be ordered in greater quantity when general storage conveniences are provided, and a closer check can be made on the stock in store when the surplus is centralized. Additional material, therefore, can be ordered before it is actually needed. The general storeroom would greatly aid in eliminating one of the most serious objections to state supervision of purchasing. The operation of a storeroom should effect considerable economy as a result of quantity buying. The procedure of purchasing under the store system provides the institution the opportunity of placing orders at a time when the best prices can be obtained.

The study showed that only two of the four institutions which operate a store maintained a perpetual inventory record. A duplicate of the stock record operated by institution Number 2 is exhibited in Figure 24. The facts show that the stock record card contains all the information relating directly to the supplies purchased that is found in the purchase order; and, in addition, the card shows the quantity of each article disbursed, the department to which the material has been issued, and the supplies left on hand. A record of the amount of material disbursed to each department enables the business manager to make the proper charges to the appropriate accounts. The information regarding the supplies left on hand is very important since it shows the storekeeper exactly when the stock has reached the point where it should be replenished. Unless an up-to-date record of stock on hand is available, a well supplied stock room is difficult to maintain since the entire stock must be checked each time an order is made, or some things are apt to be forgotten.

¹Frasier and Whitney, op. cit., pp. 344-47.

[illegible]

Fig. 24. Stock card used in institution Number 2.

Summary

The administration of purchasing and stores.- The data presented in this chapter show clearly that the purchasing function is centralized in the business office. Even orders for emergency supplies must go through the hands of the business manager. The foregoing statements have reference to purchasing in so far as it is left in the hands of the local authorities. In the majority of institutions the state exercises a rather strict supervision over purchasing. The data collected show that there are advantages and disadvantages in both state and local supervision. The available data are not sufficient, however, to justify a definite conclusion concerning the most desirable procedure in the supervision of purchasing.

The routine connected with purchasing has been very definitely worked out in teachers colleges. This fact is the result, in part at least, of state regulations. The routine followed, however, is satisfactory except for the fact that under state supervision the performance of the routine is sometimes distributed between two offices. This is a decided hindrance to the compilation of accurate records. It also causes unnecessary delay in completing purchasing routine.

The administration of purchasing can be facilitated if an adequate list of printed directions is furnished each department head. This is not done in many institutions at the present time.

In general, the requisition forms used are satisfactory. There are a few items which might be improved, however. It is not necessary for the requisition to show the free balance of any account if the business manager approves it. The practice of showing the quantity of supplies on hand is of very little value. The requisition blank should provide space for the order number, but in the majority of institutions this item is not shown.

Teachers colleges follow the very desirable practice of securing bids on supplies needed, but only two institutions use a printed form for this purpose. The use of a blank which secures a uniform type of information from all supply companies would increase the utility of the facts collected.

The purchase order blanks used are satisfactory, but printed forms are not employed as a rule for tracing orders placed but not filled. Valuable time can be saved by the use of such a form as is presented in Figure 23.

Probably the weakest phase of the purchasing procedure in teachers colleges is the general lack of supply stores. A store-room makes possible the buying of supplies in large quantities, which is almost a necessity if purchasing is to be done on an

economical basis. If a storeroom is operated many articles can be standardized and kept in stock so that requisitions can be filled at once. A perpetual inventory of all supplies on hand should be maintained.

CHAPTER VI

ORGANIZATION FOR BUSINESS MANAGEMENT

The purpose of this chapter is to outline present practices concerning organization for business management in the co-operating colleges, and to point out the elements of strength and weakness in so far as they are shown by available data. Changes in existing organizations and practices will be recommended where the evidence justifies such a procedure.

Types of administrative organization.- In the sixteen colleges studied thirteen operate under a unit type of organization, while the remaining three institutions have a multiple type of organization. The unit organization may be defined as that type which has only one official directly responsible to the board of control. This official is the president in each of the thirteen institutions. All other college officials are directly responsible to this chief executive. The multiple organization may be defined as that type which has two or more college officials directly responsible to the board of control. In the three institutions which have this type of organization the person in charge of finance is not under the direct control of the president. This means that the president is directly in charge of the educational program, while the business manager has been made responsible for financial affairs. The type of administrative organization adopted may have great effect upon both the educational and the financial programs of an institution. Where the president is in a position to direct the affairs of both functions, friction should be reduced to a minimum. After a study of thirty-five liberal arts colleges, Reeves and his associates¹ report that, "The general conclusions to be drawn from the study of the various types of administrative organization indicate that the unit type generally is the more satisfactory."

Effectiveness of the type of organization.- In the interview with college presidents and business managers a direct question was asked as to whether the present administrative organization was satisfactory. The three presidents who worked under the multiple system were dissatisfied. The fact that these presidents could not regulate business procedures as they saw fit was

¹Reeves, et al, op. cit., p. 98.

the chief objection offered to the multiple system of organization. For example, one president showed that his system of accounting did not provide for departmental accounts and that he could not set up such accounts since the business manager was opposed to this procedure. The evidence shows that a business manager, working under the multiple system, can prevent the introduction of modern methods of business procedure if he so desires. The three institutions represented are too few to determine, however, whether there is a tendency for independent business managers to dominate policies concerning business methods.

Eleven of the thirteen presidents working under the unit system were satisfied with their organization. Lack of sufficient office force was the chief objection offered by the two presidents who were dissatisfied. Many of the business managers working under a unit organization also stated that lack of sufficient office force was the chief objection to the present administrative arrangement. The evidence indicates that there is a tendency in the co-operating institutions which operate under a unit organization to overload the business office force. Such a condition greatly handicaps the efficiency of business administration and may be considered a serious weakness of the administrative organization of the institutions involved. There is no way of determining from the available evidence which of the foregoing defects concerning the two types of organization is the more serious. As a result, the data collected do not justify a definite conclusion regarding the effectiveness of the unit and the multiple systems of administrative arrangement.

Staff of the business office.- The titles given officials in charge of business affairs are presented in Table LVI. The table shows that five different titles are employed in the institutions studied. More than half of the institutions designate the individual in charge of business administration as the business manager of the college, and that title has been used in reference to this official throughout the study.

The number of separate business officials provided by each institution is shown in Table LVII. The stenographic and clerical work is done by accountants and assistant accountants in practically all institutions, and for this reason no distinction has been made between officials and employees. The data presented in this table indicate that the typical teachers college has a business manager and a chief accountant. If there is a third official he is usually an assistant accountant. Nine of the institutions do not furnish more than two regular employees for the business office, and in three of the colleges the

TABLE LVI

OFFICIALS IN CHARGE OF BUSINESS AFFAIRS IN SIXTEEN
TEACHERS COLLEGES

Officials	Number of Institutions
Business manager.	9
Financial secretary	3
Auditing clerk.	2
Bursar.	1
Accountant.	1

duties of this office are performed by one employee. The help needed in a business office depends upon many things. A few of the factors which affect the amount of help needed are student enrollment, the centralization of business affairs, and the demands made upon the office by boards of control, administrative officers, instructional departments, and directors of supplementary business activities for information regarding future and completed business transactions. In this connection Reeves and his associates¹ state that,

"In a college of five hundred students....the business office should have one capable assistant besides the business manager. This assistant should be qualified to do the bulk of the accounting and should also be able to handle most of the stenographic work. In larger institutions, and with the addition of other responsibilities, the office staff will need to be somewhat larger."

Only one institution enrolls less than five hundred students each year and twelve enroll more than one thousand each. The foregoing standard for a business force was established for an endowed liberal arts college which differs in many ways from a teachers college. For example, the endowed college must account for endowments. This is a duty for which the business force of a teachers college is not responsible. On the other hand, the teachers college must account for state appropriations, which is a duty the liberal arts colleges studied by Reeves and his associates do not perform. It seems that the factors in business administration which are peculiar to the liberal arts college are offset, in part at least, by factors which are characteristic of the teachers college. The facts that so many presidents and

¹Ibid., p. 436.

TABLE LVII

NUMBER OF BUSINESS OFFICIALS PROVIDED IN SIXTEEN
TEACHERS COLLEGES

Institution	Officials								
	Business Manager	Financial Secretary	Bursar	Auditing Clerk	Treasurer	Chief Accountant	Assistant Accountant	Cashier	Purchasing Agent
1.	X	.	.	.	.	X	X	.	.
2.	X	.	.	.	.	X	.	.	X
3.	X	.	.	.	.	X	X	.	.
4.	X	.	.	.	.	X	X	.	.
5.	X	.	.	.	.	X	X	.	.
6.	X	.	.	.	.	X	X	X	.
7.	X	.	.	.	.	X	.	.	.
8.	.	X	.	.	.	.	.	.	.
9.	.	.	.	X	.	.	.	.	.
10.	.	.	.	.	.	X	.	.	.
11.	.	.	.	X	.	.	X	.	.
12.	X	.	.	.	.	X	X	X	X
13.	X	.	X	.	X	X	.	.	.
14.	.	.	X	.	.	.	X	.	.
15.	.	X	.	.	.	.	X	.	.
16.	.	X	.	.	.	.	X	.	.
Total . . .	9	3	2	2	1	10	9	2	2

business managers expressed the need for additional office help and that so few institutions included more than two officials in the business office show that the tendency in teachers colleges is to employ too small a business force. A suitable number of officials for teachers colleges of a certain size cannot be determined, however, from the available data.

Duties of business officials.- In an attempt to collect information regarding the duties of the various business officers, college presidents were asked for written statements of these duties. A check list of duties was also used in interviewing the individual officials. In using such a device, however, the interviewer was aware that the list was probably not complete. To overcome this weakness of the check list, in so far as possible, two procedures were followed. First, all officials were asked to supplement the list by stating duties that were not mentioned in the various questions asked. This procedure, however, did not

prove very fruitful for few officials were able to state additional duties. They have never taken the time to analyze their jobs to see exactly what duties they do perform. Second, all statements made throughout the interview were carefully analyzed for the purpose of discovering additional duties which could be definitely assigned to certain officials. This method proved more fruitful than the first, and many duties were added to the several check lists. The foregoing procedure has resulted in a fairly complete analysis of the duties connected with the various business positions.

The data collected relative to the duties of the president with respect to business administration are presented in Table LVIII. A survey of the entries in the table shows that the duties

TABLE LVIII

DUTIES OF THE PRESIDENT REGARDING BUSINESS ADMINISTRATION
IN SIXTEEN TEACHERS COLLEGES

Duties	Number of Institutions
To act as a consultant in formulating business policies.	16
To represent the college before the board of control and other agencies who are instrumental in providing funds for the college.	15
To prepare and supervise the operation of the working budget.	15
To act as chief executive of the board of control in administering the business affairs of the college	13
To recommend the appointment of all business officials	13
To direct the preparation and distribution of reports related to business administration. . . .	14
To approve all expenditures	12
To countersign all vouchers	9

of the president are fairly uniform in this group of colleges. No duty listed for the president is specified by less than nine institutions. The entries also show that the president is the chief director of practically all business functions.

The duties of officials directly in charge of business affairs are presented in Table LIX. An examination of the entries in this table shows that there is considerable agreement on the first five duties listed, while the remainder of the duties are not recognized by more than half of the institutions. Many of

TABLE LIX

DUTIES OF THE OFFICIALS DIRECTLY IN CHARGE OF BUSINESS
ADMINISTRATION IN SIXTEEN TEACHERS COLLEGES

Duties	Number of Institutions
To supervise the financial affairs of auxiliary activities.	16
To prepare such reports as are required by the board of control, president, department heads, and certain educational and governmental agencies.	15
To maintain a set of records and accounts of all financial transactions.	15
To collect all money derived from local enterprises and fees	13
To delegate duties to assistants.	10
To assist in the selection of assistants.	8
To summarize budget estimates	7
To assist the president in summarizing budget estimates	7
To purchase all supplies.	7
To perform the preliminary steps in purchasing supplies.	7
To supervise the operation and maintenance of the physical plant.	6
To assist in the administration of student loan funds and other forms of student assistance . . .	5
To pay all bills.	4
To make internal audits at definite periods of time.	2

the duties mentioned by only a few are very important. For example, "making internal audits at definite periods of time" was mentioned in only two cases. This duty should be performed or directed by the business managers in all institutions. Where the internal audits are not made, errors in accounting and in managing institutional revenue may continue throughout the year. It is important to note that the business manager acts as purchasing agent in fourteen institutions, and supervises the operation and maintenance of the physical plant in six. Such facts show why so many business officials indicate that the office force is overworked.

Table LX exhibits the duties performed by the purchasing agent. More than half the duties listed are delegated to the purchasing agent in a majority of the institutions, but this official is not held responsible for many of the important items listed. It should be noted, however, that a few of the duties

TABLE LX

DUTIES OF THE PURCHASING AGENT IN SIXTEEN TEACHERS COLLEGES

Duties	Number of Institutions
To receive requisitions and check them against departmental budgets (where business manager acts as purchasing agent)	14
To keep a record of purchase orders placed.	12
To collect annually information on college needs.	11
To keep a supply catalogue file	11
To develop a standard list of supplies and equipment	10
To secure bids on supplies and equipment needed	10
To keep a record of all orders received	10
To keep an up-to-date price list file	10
To order supplies and equipment	7
To check all supplies received.	7
To verify all invoices after orders received have been checked	5
To distribute or supervise the distribution of supplies.	2
To maintain a perpetual inventory of stock on hand.	2
To notify departments of orders placed and received.	1
To make reports to faculty members concerning available supplies.	1

refer directly to the operation of a storeroom, while only a few institutions maintain a general supply department. This fact partially accounts for the low frequency of at least two duties listed.

The duties performed by the chief accountant are summarized in Table LXI. An examination of this table reveals that the first duty listed is assigned to the chief accountant in all ten institutions. None of the other duties, however, have a frequency greater than four, which shows lack of agreement concerning a majority of the duties listed.

The study of duties of the various officials of teachers colleges revealed many variations in practices which could not be presented in the foregoing tables concerning duties. It seems advisable to present at least a few examples of such variations, however, and to show why such conditions exist. The official designated as business manager in institution Number 7 has nothing to do with accounting or the preparation of reports, while in institution Number 12 both accounting and reporting are supervised by the business manager. In institution Number 8 the

TABLE LXI

DUTIES OF THE CHIEF ACCOUNTANT IN TEN TEACHERS COLLEGES

Duties	Number of Institutions
To have charge of the actual accounting routine for both receipts and disbursements	10
To serve as secretary to the business manager . . .	4
To copy and file such requisitions as are necessary for a complete record of all expenditures and encumbrances.	4
To prepare pay-rolls from information furnished by administrative officers	3
To prepare reports as directed by the business manager	3
To prepare checks to be submitted to officials who are authorized to sign them	2
To prepare vouchers which are to be forwarded to local or state authorities.	2
To prepare claims which are to be submitted to state officials	2
To assist in collecting money due the college . . .	1

registrar has charge of all business affairs except the supervision of the budget, which is a duty performed by the president. In institution Number 3 the business manager is charged with the responsibility of collecting all money due the college, but in institution Number 6 the business manager is relieved of this duty. The study reveals the fact that such variations are brought about by state laws, local administrative set-up, and the personnel involved. It is obvious that the duties of a business manager in a college where practically all the institutional accounting, purchasing, and reporting is done at the state capital, would be different from those of a business manager of a college where such functions are performed within the institution.

The investigation also shows that in the smaller institutions where the president and business manager constitute the entire business force either official may be performing duties that are delegated to other officials in larger institutions. The personnel of the business force also influences the extent, scope, and distribution of the services rendered. Evidently, the chief executive is justified in delegating a particular responsibility to the person who can render the most efficient service. It is often necessary to adapt procedures to existing conditions. If, however, more than one duty is assigned to a single individual, it appears that these duties should be more or less closely related

in so far as possible. Situations were encountered, on the other hand, in which adaptations have not been made and the personnel was not contributing its full share to the efficiency of the business administration. Business managers were found acting as their own typists with what appeared to be efficient stenographers available. Furthermore, antiquated methods of handling institutional accounts were employed in several instances simply because the person in charge had followed a given procedure for many years.

The allocation of a certain duty to a certain officer, however, is not so important as a specific definition of that duty in order that the official may have a clear understanding of the assignment for which he is held responsible. The task of producing a written list of the duties performed by the various business officials has not been undertaken by teachers colleges. Several presidents and business managers expressed a belief that such a list would be valuable, but made no attempt to produce one. The president of institution Number 1 stated that he had no desire to reduce to writing the many duties assigned to the several business officials. He offered the following reasons to justify his position: first, a man working under a definite set of written rules does not want to take suggestions from anyone; second, written rules make workers narrow; and third, written rules tend to make workers more like a machine. The question of a written list of duties is discussed by Reeves and his associates,¹ and the authors state that,

"Failure to define clearly the duties expected of each officer is very likely to lead to confusion and inefficiency. It would be very much worth while for each of the colleges of this group to reduce to writing the list of duties expected of the several administrative officers."

The quotation does not agree with the statements made by the president of institution Number 1. If the duties inherent in each function peculiar to the business administration are reduced to writing a better understanding of these duties should be brought about. This understanding should result from the analysis involved in preparing the written document. Such a study will eliminate unnecessary overlapping. Also, the official who delegates responsibility can be assured that each function has been definitely provided for. The foregoing analysis indicates that a written statement of the duties peculiar to each business position should be prepared. Such a statement would not prevent the chief executive from delegating duties to any official at any

¹Ibid., p. 89.

time; in fact, it would facilitate the procedure.

Summary

Organization for business management.- A majority of the colleges studied are operating under a unit type of organization. Only three institutions operate under a multiple organization. A conclusion concerning the general effectiveness of the two types of organization cannot be reached from an analysis of the facts presented in this chapter.

A brief study of the number of officials provided for the business office of teachers colleges and the duties they should perform indicates that the business office is insufficiently manned in the majority of cases. Such a condition prevents the business department from providing the services that it should render college officials in administering the institution.

The data show clearly that the officials in the colleges visited have never made an analytical study of the duties performed by the various business officers. A written statement of duties peculiar to each phase of business administration would assist materially in delegating various duties to the proper officials.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

The purposes of the present investigation have been: first, to present an accurate account of the business administration in a selected group of teachers colleges; second, to make a critical analysis and interpretation of the data collected and to indicate the elements of deficiency in business administration; and third, to set up an adequate system of business administration in the light of a critical evaluation of the facts disclosed. The first two purposes have been accomplished in the foregoing chapters. The recommendations concerning the third purpose have also been made, but no organized program has been set up. The aim of this chapter, therefore, is to summarize the conclusions that can be drawn from the analysis made, to point out the implications of the conclusions, to outline a suitable program of business administration in teachers colleges, and to suggest certain problems upon which there is need for further research.

Financial Accounting

Conclusions and implications.- The first phase of the present investigation deals directly with accounting. An analysis of the data concerning this problem resulted in three conclusions.

1. The efficiency of the accounting function in the teachers colleges studied can be improved by the extension of the use of certain books of accounting. However, the use of the cash-disbursement book should be discontinued in institutions which operate the voucher register. A failure to operate the necessary number and types of books of accounting limits accordingly the information that may be recorded concerning financial transactions. For example, unless a general ledger is operated the summary or control accounts cannot be maintained. The service which an accounting system may render is greatly reduced when a necessary book of accounting is omitted from the system of records.

2. There is need for a more suitable selection, classification, and organization of asset, liability, income, and expenditure accounts in teachers colleges. The accounts operated determine to a great extent the information that may be secured from the records. For example, a separate account for each auxiliary

activity operated is needed in order to determine whether the enterprises are self-supporting. The accuracy with which accounts are classified determines, in part at least, the extent to which they exhibit a true picture of financial operations and conditions. The selection, classification, and organization of accounts also determine the facility with which information may be secured from the financial records.

3. The utility of the annual inventory will be materially increased if more vital information, such as the location and the state of repair of the various items of movable property, is included in the report. The efficiency of the repair and replacement program is affected by the information concerning property which the local authorities have. Property can be administered so as to make it serve the greatest number of people only when the exact location and the number of items are known.

A program of accounting.- An adequate program of accounting for teachers colleges should include: (1) a set of books in which may be recorded both the summary and the detailed facts of all financial transactions; (2) office forms which will facilitate the routine involved in financial procedures; (3) a set of accounts which will show all assets, liabilities, income, and expenditures, and which will provide such information as is needed by college authorities in administering the various functions of this particular type of institution; and (4) an inventory system which will provide the information needed in property administration.

The books needed in maintaining a satisfactory accounting system should include a general ledger in which a summary of all financial transactions is maintained. This record provides the control for all other financial accounts and is necessary in the preparation of a balance sheet.

The budget ledger is probably next in importance to the general ledger. Since the entire group of institutions operates on a budget plan, a book of accounting which shows the exact status of each detailed budget item is necessary.

The complexity of an adequate accounting system for the co-operating colleges justifies the operation of subsidiary ledgers. These books of accounting will relieve the general ledger of many burdensome details, and at the same time provide a separate financial record of certain activities which are either sponsored or supervised by the institution. The number of subsidiary books needed for auxiliary activities depends upon the number and size of the activities operated. A separate set of accounts should be maintained for each activity.

An adequate set of books requires certain records of the

original entry type in which is recorded the evidence supporting the summary entries found in the general ledger. In the colleges studied this requirement can best be satisfied by the operation of a voucher register, a cash-receipt book, a general journal, and a pay-roll register.

The voucher register is the only one of the books recommended which is now in use in as many as 60 per cent of the institutions. It is highly desirable that the college authorities check their books of accounting against the foregoing recommendations and make provision for those books which are not at present in operation.

The investigation has shown that certain office forms are necessary if financial transactions are to be conducted with a high degree of efficiency. A duplicate receipt form furnishes the basic information from which the income accounts are posted. A general receipt form that can be used in the collection of all fees is recommended. The voucher is the second important office form needed in connection with financial transactions. Voucher operation is made simpler where a general form is used. The form can be so arranged that the information required may be stamped on it with very little trouble. The voucher form employed by institutions which make disbursements should include a check. Such a form can be made to serve as a receipt for bills paid.

A critical analysis of accounting, budgetary procedure, and reporting shows that a suitable system of accounts for teachers colleges should include general ledger or control accounts, and budget or detailed income and expenditure accounts. The general ledger accounts should be set up on the basis of four main funds, namely, current funds, loan funds, plant funds, and agency funds. This book of accounting should also carry depository and budget control accounts. A division should be assigned to each fund and the assets, liabilities, and funds belonging to each general fund should be shown. The current fund division should contain two sections, one for the current educational funds and one for the current funds belonging to auxiliary activities. The unexpended and the permanent plant funds should be shown in separate sections in the plant fund division of the general ledger.

The budget accounts for income should be set up on the basis of source, and the detailed items under each source should be arranged to suit the needs of individual institutions. For example, the income from student fees may be distributed to tuition, music fees, library fees, laboratory fees, and diploma fees.

The expenditure accounts will be of greatest service if

they are set up on the basis of function and organization units. The functional headings in teachers colleges should be administration and general expenses, instruction, extension service, library service, and operation and maintenance of the physical plant. The individual institutions should determine the organization units to be included. The expenditure accounts must also provide for auxiliary activities and other non-educational expenditures.

The investigator has prepared charts of general ledger and budget accounts adapted to the needs of the teachers colleges studied which set forth in organized form the foregoing recommendations concerning accounts. The detailed explanations of this program of accounting were presented in chapter 11. The study has shown clearly that accounting as now done in a majority of the institutions visited does not satisfy the requirements specified in the recommendations.

The inventory record of property provides the most useful information when it shows the name of the article, the number of items in each class, unit price, total price, location of movable property, and the state of repair of each item or group of items. It is difficult to administer property efficiently unless the location and state of repair of each property item is known.

Budgetary Procedure

Conclusions and implications.- A careful study of budgetary procedure has resulted in four important conclusions.

1. When viewed as a unit, the budgetary procedure in the sixteen teachers colleges studied is fairly satisfactory.
2. The income and expenditures of auxiliary activities should receive the same consideration as other income and expenditures in formulating the budget. The operation of business activities without a definite financial plan does not provide any assurance whatever that the expenditures will be limited to the income of the activity. Since auxiliary activities are supposed to be self-supporting, it is very desirable that there be no deficit at the end of the year. A financial plan aids in preventing such a condition.
3. Department heads should be supplied with appropriate budget estimate forms together with adequate facts concerning past expenditures and institutional policies when requested to prepare budget estimates. Comparative data and information concerning institutional policies render the preparation of budget estimates more scientific. The department head can judge the adequacy of past appropriations and expenditures since the year's work is complete, and the requests for the coming year can be

adjusted accordingly. The requests can also be kept in harmony with institutional policies. The budget form aids the president in securing the information needed in a uniform order.

4. The use of a contingent fund should be extended to all institutions, and the responsibility for making minor budget shifts within a given fund should be delegated to all presidents for the purpose of producing budget flexibility. Budget flexibility increases efficiency in budget administration by enabling the president to meet financial needs that could not be foreseen when the budget was prepared.

A program of budgetary procedure.- The data presented in chapter iii disclosed the fact that five important phases should be considered in developing a program of budgetary procedure for teachers colleges, namely, (1) the budget calendar, (2) the preparation of the tentative budget, (3) the approval of the tentative budget, (4) the preparation and approval of the operating budget, and (5) the development of aids in budget administration.

The budget calendar includes three important dates. They are: (1) the beginning and closing of the fiscal year, (2) the date work is begun on the tentative budget, and (3) the date on which the tentative budget is completed. June 30 and July 1 seem to be the most satisfactory dates for the closing and opening of the fiscal year, respectively. Work on the budget should be started at least eight months before the beginning of the new year. November 1 would satisfy this requirement. The tentative budget should be completed within three months after work on it is once begun.

The procedure followed in the preparation of the tentative budget should recognize two important steps, namely, the preparation of the income budget, and the preparation of the expenditure budget. A careful study should be made of each source of support before an estimate is made of the income the source will produce. The president and business manager should prepare these estimates. The income budget is then set up from the estimates made.

The expenditure budget should begin with a study of previous appropriations and expenditures and a formulation of policies for the next financial period. When the president has definitely decided upon the policies that affect the educational and service departments, the business manager should mail to the appropriate persons budget estimate forms. This step in budget making is not followed by the co-operating teachers colleges. The department should prepare supporting evidence for all unusual requests or changes in estimates from previous years. The budget

estimates should than be submitted to the president. He should confer with the appropriate department heads concerning adjustments that should be made. After needed adjustments have been effected, the president passes the estimates to the business manager who compiles the tentative budget. The detailed items in the tentative budget should follow the same classification and organization used in the budget accounts. The president then studies the budget as a whole and makes such changes as seem desirable. He should always utilize, however, the judgment of and the information possessed by other officials who are interested in a particular budget adjustment. The budget, after all necessary changes have been made, is sent to the business manager who prepares the final copy. A copy is mailed to each member of the board of control. This should be done probably two weeks in advance of the date for the board meeting in which the budget is to be presented for approval. The president should be present at the meeting in which the budget is formally considered for the purpose of making any explanations or justifications of budget requests that the board may desire. The budget should be returned to the institution for such adjustments as the board deems necessary. The president presents a copy of the budget to the state finance department when it is approved by the board. The budget with other state requests is presented to a legislative committee. The president should have the privilege of appearing before this committee for the purpose of justifying the requests made. After the budget is approved by the legislative committees, it is presented to the legislature for adoption. Appropriations should be made in lump sums on the basis of a few broad categories. The budget becomes a law when adopted by the legislature and signed by the governor.

The detailed allocations in the operating budget are made by the president from the few large appropriations made by the legislature. The allocations should follow very closely the detailed items in the tentative budget. The working budget is presented to the board of control for approval before it is placed in operation.

One of the most important tasks in setting up a program of budgetary procedure is the development of aids in administering the budget. This involves practically every phase of business administration. Providing for budget administration consists chiefly of developing methods and instruments of budget control. A set of detailed budget accounts which are adapted to the needs of the teachers college is probably first in importance in budget administration. A suitable set of such accounts has been presented in chapter ii. A complete departmental file of requi-

sitions and orders should be maintained to provide a record of commitments which have not been liquidated. A complete plan of financial reporting should also be developed as an aid in budget administration. Such a plan, based upon the needs of teachers colleges, is presented in chapter iv.

In general the budgetary practices and procedures in the institutions studied are satisfactory. There are a few vital phases in the program recommended, however, for which the co-operating colleges do not provide. Very few institutions employ budget estimate forms or provide information in the form of past expenditures or institutional policies for department heads. The items mentioned constitute one of the most important phases of budgetary procedure. The instruments of budget control employed by the colleges are not at all satisfactory. The two most important defects found relate to the budget accounts operated and to the reporting procedure followed. The flexibility of the budget should also be increased by a majority of the institutions.

Financial Reports

Conclusions and implications.- A critical analysis and interpretation of the data presented concerning reports and audits resulted in two important conclusions.

1. A definite plan of financial reporting, which will satisfy the requirements of teachers colleges, should be developed with respect to:

- a. Type of reports
- b. Schedules to be included
- c. Classification and organization of expenditure items
- d. Column headings
- e. Written explanations

The monthly reports to the president and department heads are the types most generally lacking. A well-prepared report contains certain summary and detailed schedules of financial transactions and conditions. The omission of a needed schedule eliminates a part of the service which a report may render. The type and organization of the information included in the report also affects its value.

2. The auditor's report should include constructive criticism of accounting plans and procedures. If the auditor's program does not call for careful study and reporting on business procedures the audit is incomplete. A study of accounting as it is now done in teachers colleges shows clearly that audits in the past have given very little if any constructive criticism of business practices.

A program of financial reporting.- An analytical study

of the data collected for the present investigation showed that a program of financial reporting should provide for certain types of reports, namely, monthly, annual, and biennial reports, and the various schedules and forms to be included in each.

The monthly report should be prepared chiefly for the use of the president. Copies of the report, however, should be furnished the board of control and other interested state officials. A monthly report which meets the needs of teachers colleges should include the following schedules:

- A balance sheet
- A cash summary
- A statement of unappropriated income
- A statement of unrealized income
- A summary statement of budget appropriations
- A separate statement for each organized unit represented in the budget accounts

A carbon copy of the separate statements for each organized unit should be provided for the head of each unit. A form suitable for each of the foregoing schedules is presented in chapter iv.

There should be two types of annual reports. This recommendation refers to the regular annual report showing the results of the financial operations for the year and the auditor's report. The following schedules should be included in the regular annual report:

- A balance sheet
- A statement of income for the year
- A statement of expenditures from current funds for the year
- A statement of current funds
- A statement of loan funds
- A statement of plant funds

Suitable forms for presenting these schedules are shown in chapter iv.

The program of financial reporting should include an annual independent audit of all financial transactions. The auditor's program should be arranged so as to provide two types of information. First, the exact status of each fund operated by the institution should be clearly shown. This phase of the report in teachers colleges should include a schedule for current funds, loan funds, plant funds, and agency funds. There should also be a schedule showing the status of depository accounts. Individual institutions may desire to include other schedules, such as student activity fund, statement of income from student fees, and diploma fund. The second type of information which the auditor's

report should contain is a criticism of present financial plans and procedures.

The biennial report should show the status of the funds operated, and may be compiled from the audits or the annual reports.

The Administration of Purchasing

Conclusions and implications.- The data collected in this investigation concerning the administration of purchasing justify the following conclusions:

1. The phases of purchasing procedure which relate to the requisition, the purchase order, and the invoice are in general satisfactory.

2. The efficiency of two phases of purchasing routine, namely, securing bids, and tracing orders, can be materially increased by the use of suitable printed forms. The purchasing agent should be sure that he is going to receive uniform information when he requests several supply companies to submit bids on material and equipment; otherwise, it is difficult to determine which is the best bid. A printed form is a valuable aid in securing uniformity in the information provided by the supply company. The office force may also save considerable time by the use of a tracer form.

3. The practice of passing all requisitions to the president for approval is unsatisfactory. Only requisitions which require a decision concerning the advisability of making the purchase should be passed to the president for approval. There are many duties that are not of a routine nature to which the president must devote his attention. He should delegate to some other official certain routine duties so as to provide sufficient time for more important ones.

4. The service now rendered by the supply department in teachers colleges can be greatly improved by the maintenance of a general storeroom and a perpetual inventory of supplies in stock. A purchasing procedure which provides for a general storeroom should enable the purchasing department to fill orders as they are received. The perpetual inventory should provide an accurate check on the status of supplies in stock. The purchasing agent should know at all times just what material he needs to order and when the order should be placed. The procedure outlined reduces delays in placing supplies in the hands of the instructor to a minimum, thereby removing a possible hindrance to instructional efficiency. The operation of a general storeroom is probably the most economical procedure in purchasing supplies.

A purchasing program.- A purchasing program should consist

of three general phases: (1) the purchasing organization, (2) the purchasing routine, and (3) the storeroom.

The purchasing department should be headed by a purchasing agent. This official is directly responsible to the president in thirteen of the sixteen institutions visited. The business manager acts as purchasing agent in most cases. The organization should provide for the centralization of purchasing by delegating the responsibility for placing orders to the purchasing agent only.

A study of purchasing routine in teachers colleges showed that the requisition should originate in the department, be approved by the department head, and passed to the business manager where it is checked against the departmental budget. The requisition should go to the president for his approval if it represents an unusual request. After the proper approval it should be passed to the purchasing agent. This official should supply the material requisitioned from the storeroom or secure the necessary bids and place a purchase order. In the teachers colleges studied complete departmental files should be maintained in the business office for both requisitions and orders placed. These files provide a departmental encumbrance record. The invoice is filed by number after a satisfactory check is made with the material received. The corresponding requisition and purchase order are withdrawn from the departmental file and are filed by number. The voucher should then be prepared in duplicate and the original with a voucher check should be mailed to the vendor who signs the voucher and returns it to the institution to serve as a receipt for the payment made. The purchasing routine also involves certain office forms which facilitate the procedure. The forms should include a requisition form, delivery form, purchase order form, tracer form, and voucher form and check.

A purchasing program should include a general supply store where institutional needs can be anticipated and provisions made in advance. The purchasing department has an opportunity to render greater service to the institution through quantity buying. A perpetual inventory record as is described in chapter v should be maintained in a well organized purchasing program.

The foregoing recommendations are based on the assumption that the institution is free to regulate its own purchasing procedure. This is not true, however, in all colleges. If the various state regulations were considered in outlining a purchasing procedure it would be necessary to set up a program for each state. On the other hand, there are certain parts of the recommendations that can be adopted by all institutions, and many can follow them in their entirety.

Organization for Business Management

Conclusions and implications.- A study of the administrative organization and the factors which influence it in the selected teachers colleges resulted in four important conclusions.

1. There is lack of definite knowledge among business officials concerning the specific duties for which each member of the department is held responsible. Lack of understanding of such duties may result in confusion, in duplication of effort, and often in waste of time and money. The analysis involved in reducing to writing the duties inherent in each position should give the authorities a clear understanding of each position. The detailed lists of duties will enable the president to make sure that the proper provision has been made for each position when delegating responsibility to the various officials.

2. Many state regulations concerning business administration are framed to meet the needs or to satisfy particular interests of state officials without due regard for the best interest of the institution. Such regulations were discovered in accounting, budgetary procedure, purchasing, financial reporting, and auditing. A regulation which does not serve the best interests of the college hinders administrative efficiency, and forces the local authorities to work under a handicap.

3. State regulations delay the progressive introduction of new methods and devices of business administration. Such control often forces teachers colleges to employ prescribed methods when more efficient procedures and devices are known by local officials.

4. In comparison with the findings in related studies, the presidents of the teachers colleges visited participate more in business affairs than do presidents of liberal arts colleges and universities. Teachers college presidents should check carefully the duties they perform and the time devoted to each. In setting up a work schedule problems involving educational and financial policies should receive first consideration.

Organization recommended for business management.- The data available do not justify definite recommendations concerning the type of administrative organization best suited to the teachers college. In general, authorities have recommended the unit organization for other types of colleges. This recommendation, however, has been based on very meager evidence.

Problems for Further Study

The investigation has revealed several important problems which could not be satisfactorily answered with the data available. Three problems which merit investigation are as follows:

1. There is need for an intensive study of the efficiency of the multiple and unit type of administrative organization in teachers colleges. There are many advantages and disadvantages offered for each type of organization, but no one really knows which produces the better results. A definite solution of this problem would probably require an extensive cost study, and the development of some technique by which the quality and type of educational offering could be evaluated. The collection of the data needed for such studies was beyond the limits of the present investigation.

2. There is need for a study of what constitutes an adequate business office force in teachers colleges of different sizes. The lack of sufficient office force reduces the efficiency of business administration. A solution of this problem, seemingly, must be based upon a complete job analysis of all duties which are performed and which should be performed by the business force together with an accurate tabulation of the time that is devoted to each duty.

3. The problem of state and local supervision of purchasing is one of the most controversial issues relating to the business administration of teachers colleges. The efficiency of either state or local supervision of purchasing is seriously attacked by the exponents of each method. There are no objective data at present upon which a decision concerning the more desirable type of purchasing supervision can be based. It will be necessary to set up standards for the material used in order to determine whether the institution derives a benefit from the quality of material purchased under either type of supervision. Such standards would also be necessary in making the cost studies needed in solving the problem.

Many weaknesses in the business administration of teachers colleges have been revealed by the present investigation, and the data collected were sufficient to justify numerous recommendations which, if followed, should improve existing conditions. Questions were raised, however, which suggest that there is great need for additional study in the field of college business administration. It is hoped that other interested persons will be stimulated to attack many of the problems which constitute controversial issues in this field.

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APPENDIX A

Appendix A contains the names and locations of the sixteen teachers colleges from which the data for the study were collected.

Name of Institution	City	State
East Central State Teachers College	Ada	Oklahoma
Iowa State Teachers College	Cedar Falls	Iowa
East Texas State Teachers College	Commerce	Texas
Northern State Teachers College	DeKalb	Illinois
North Texas State Teachers College	Denton	Texas
Central State Teachers College	Edmond	Oklahoma
Kansas State Teachers College of Emporia	Emporia	Kansas
Western State Teachers College	Kalamazoo	Michigan
The Kent State College	Kent	Ohio
State Teachers College	Mankato	Minnesota
Northwest Missouri State Teachers College	Maryville	Missouri
Wisconsin State Teachers College	Milwaukee	Wisconsin
Ball State Teachers College	Muncie	Indiana
State Normal University	Normal	Illinois
New Mexico State Teachers College	Silver City	New Mexico
Winona State Teachers College	Winona	Minnesota

APPENDIX B

Appendix B shows a frequency distribution of the budget items employed by sixteen teachers colleges

TABLE LXII

ADMINISTRATIVE AND GENERAL EXPENDITURE ACCOUNTS OPERATED
BY FIFTEEN TEACHERS COLLEGES

Accounts	Number of Institutions
Postage, telephone, and telegraph	14
Printing (forms, letter-heads, etc.)	14
Catalogues, bulletins, and publicity.	14
Equipment and supplies.	13
Travel.	13
Administrative salaries	12
Salaries of clerical assistants	10
Entertainment, religious services, and social welfare	6
Educational conferences and special lectures.	5
Commencement expenses	4
Miscellaneous equipment and expenses.	4
Freight, express, and drayage (covering office supplies and equipment)	3
Insurance (burglary).	3
Placement bureau.	3
Association fees.	3
Audit	2

TABLE LXIII

INSTRUCTIONAL EXPENDITURE ACCOUNTS OPERATED FOR THE VARIOUS
DEPARTMENTS IN FIFTEEN TEACHERS COLLEGES

Accounts	Number of Institutions
Salaries (instructors).	13
Equipment	11
Supplies.	11
Salaries (student assistants)	3
Travel.	2
Express, freight, and drayage	2
Miscellaneous expenses.	1

TABLE LXIV

ACCOUNTS OF EXTENSION SERVICE OPERATED BY
TWELVE TEACHERS COLLEGES

Accounts	Number of Institutions
Salaries of instructional staff	5
Salaries of clerical assistants	5
Printing and mimeographing.	5
Supplies.	3
Travel.	2
Postage	2

TABLE LXV

ACCOUNTS OF LIBRARY SERVICE OPERATED BY
FIFTEEN TEACHERS COLLEGES

Accounts	Number of Institutions
Books and pamphlets	9
Magazines	9
Salaries of regular staff	6
Salaries of student assistants.	6
Equipment and supplies.	5
Binding	3
Postage	1

TABLE LXVI

ACCOUNTS OF OPERATION AND MAINTENANCE OF PHYSICAL PLANT
OPERATED BY FIFTEEN TEACHERS COLLEGES

Accounts	Number of Institutions
Salaries and wages.	12
Fuel, light, water, and power	12
Care of buildings	8
Repair of buildings	8
Care and maintenance of grounds	8
Transportation expenses	8
Equipment and supplies.	6
Property insurance.	3

